

**ADDENDUM No. 6– Fort Sam Transportation Projects**

**CITY OF SAN ANTONIO**

**Capital Improvements Management Services Department**



**PROJECT NAME: Fort Sam Transportation Projects**

**DATE: August 23, 2011**

This addendum shall be included in and be considered part of the plans and specifications for the above named project. The contractor shall be required to sign an acknowledgement of the receipt of this addendum at the time he receives it and returns the original signed form with the bid package.

CIMS Project No. 40-00015

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**GENERAL**

1. Consultant is providing the revised City of San Antonio General Specifications Version 2004.
2. Consultant is providing the revised 025 Unit Pricing Form.

**ATTACHMENTS:**

1. City of San Antonio General Specifications Version 2004
2. Revised 025 Unit Pricing Form

END OF ADDENDUM No. 6

**ADDENDUM REVIEWED & APPROVED BY:**

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CIMS Project Manager

Date

**NOTICE TO PLANHOLDERS:**

Please insert this Addendum into your copy of the Project Construction Documents.

**CITY OF SAN ANTONIO  
DEPARTMENT OF CAPITAL IMPROVEMENTS MANAGEMENT SERVICES  
CONTRACT SERVICES DIVISION**

RECEIPT OF ADDENDUM NUMBER(S) 6 IS HEREBY ACKNOWLEDGED FOR PLANS  
AND SPECIFICATIONS FOR CONSTRUCTION OF: **Fort Sam Transportation Projects**  
**40-00015**

FOR WHICH BIDS WILL BE OPENED ON **Tuesday, August 30, 2011**

THIS ACKNOWLEDGEMENT MUST BE SIGNED AND RETURNED WITH  
THE BID PACKAGE.

Company Name: \_\_\_\_\_

Address: \_\_\_\_\_

City/State/Zip Code: \_\_\_\_\_

Date: \_\_\_\_\_

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Print Name/Title



**City of San Antonio  
General Specifications  
Version 2004**

These City of San Antonio General Specifications Items 1 through 9 will replace the General Provisions Items 1 through 9 in the Texas Department of Transportation's Standard Specifications for Construction and Maintenance of Highways, Streets and Bridges.

**DIVISION I  
GENERAL REQUIREMENTS AND COVENANTS  
SPECIFICATIONS FOR 2004  
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## ITEM 1

### DEFINITION OF TERMS

**1.1. Definitions.** Wherever the following terms are used in these specifications or other contract documents, the intent and meaning shall be interpreted as shown below:

#### 1.2. Abbreviations:

AAN	American Association of Nurserymen.
AAR	Association of American Railroads.
AASHTO	American Association of State Highway and Transportation Officials.
ACPA	American Concrete Pipe Association.
AITC	American Institute of Timber Construction.
ANSI	American National Standards Institute.
API	American Petroleum Institute.
AREA	American Railroad Engineers Association.
ASTM	American Society for Testing and Materials.
AWG	American Wire Gage.
AWPA	American Wood Preservers Association.
AWPB	American Wood Preservers Bureau.
AWPI	American Wood Preservers Institute.
AWS	American Welding Society.
AWWA	American Water Works Association.
DFPA	Douglas Fir Plywood Association.
IES	Illuminating Engineering Society.
IMSA	International Municipal Signal Association.
ITE	Institute of Transportation Engineers.
NBFU	National Board of Fire Underwriters.
NEC	National Electrical Code (Published by NBFU).
NEMA	National Electrical Manufacturers Association.
NFPA	National Forest Products Association.
NIST	National Institute of Standards and Technology
OSHA	Occupational Safety and Health Administration
SFPA	Southern Forest Products Association.
SPIB	Southern Pine Inspection Bureau.
TxDOT	Texas Department of Transportation
UL	Underwriters Laboratory, Inc.
WWPA	Western Wood Products Association.

**1.3. Arterial Highway.** A general term denoting a highway primarily for through traffic, usually on a continuous route.

**1.4. Authorization To Proceed.** A written notice given by Owner to Contractor establishing the date on which the Contract Time will commence to run and on which Contractor shall start to perform Contractor's obligations under the Contract Documents. (Also referred to as Notice to Proceed or Work Project Authorization).

**1.5. Bid Error.** A mathematical mistake by the prime contractor in the unit price entered into the bid proposal.

**1.6. Bidder.** An individual, partnership, limited liability company, corporation or any combination thereof submitting a bid proposal.

**1.7. Bridges.** Structures of over 20-foot span measured from face to face of abutments, or in case of copings, from face to face of copings, and multiple span structures of over 20-foot length, measured between inside of end walls along the centerline of the roadbed.

**1.8. Certificate of Insurance.** City of San Antonio approved form covering insurance requirements stated in the contract.

**1.9. Change Order (See Field Alteration).** A written description by the Department covering modifications to the original contract necessary to complete the contracted work

**1.10. City.** The City of San Antonio, Texas and "Owner" of this Project. Whenever in this Contract is found the term "City" or "Owner" or other designation of any City institution, officer, employee or title, or a pronoun in its, his or their place, the same shall, unless indicated otherwise, be understood to mean the City of San Antonio or its successors, or the governing body, or the person or persons now or hereafter holding or exercising the duties of such designated official position, office, employment or title, in said City, or any person or persons acting lawfully in the corresponding official capacity on behalf of the City at such time and within the powers and authority held by him or them.

**1.11. City Council.** The duly elected members of the council of the City of San Antonio, Texas.

**1.12. Commission.** The Texas Transportation Commission.

**1.13. Construction Bulletin C-5.** Manual of procedures and requirements for manual welding and submerged arc welding for the fabrication of structural steel.

**1.14. Construction Bulletin C-6.** Manual of testing requirements for the qualification of welders for structural and reinforcing steel.

**1.15. Construction Bulletin C-8.** Manual of procedures for driving and test loading piling.

**1.16. Construction Bulletin C-9.** Manual of procedures for constructing and test loading drill shafts.

**1.17. Construction Bulletin C-11.** Manual of procedures to be followed in the design and control of portland cement concrete.

**1.18. Construction Bulletin C-14.** All references to Construction Bulletin C-14 for the design of asphaltic concrete pavement shall be understood to denote Test Method Tex-204-F. All references to Construction Bulletin C-14 for the calibration of cold aggregate feeds shall be understood to denote the plant manufacturer's recommended calibration procedures or other method acceptable to the Engineer.

**1.19. Construction Observer/Inspector "COI."** The authorized representative of the Director of Public Works assigned by the Owner to observe and inspect any or all parts of the Project and the materials to be used therein. (Same as Inspector)

**1.20. Consultant.** A person registered as a professional engineer pursuant to Article 3271a, V.T.C.S., employed to provide professional engineering services and having overall responsibility for the design of a project or a significant portion thereof, together with administrative supervision of any subconsultants Consultant may retain. The term "Consultant," unless the context clearly indicates otherwise, means an engineer in private practice retained for a specific project under a contractual agreement with the Owner.

**1.21. Contract.** The agreement between the City and the Contractor covering the furnishing of materials and performance of the work. The contract will include, but not be limited to the Plans, Standard Specification incorporated by reference, Special Provisions, Special Specifications, Contract Bonds, Supplemental Agreements and Field Alterations.

**1.22. Contract Documents.** The Contract Documents consist of Bidding Documents such as: the Advertisement or Invitation to Bid, the Instructions to Bidders, the Contractor's completed Bid Proposal form, the Addenda, the Contract, the Conditions of the Contract (General, Supplemental and Special Conditions), the Plans, the Specifications, the Field Alterations, the Payment and Performance. The Contract Documents form the complete CONTRACT, which represents the entire and integrated agreement between the Owner and the Contractor and

supersedes all prior negotiations, representations or agreements, either written or oral.

**1.23. Contract Sum.** The total compensation payable to the Contractor for performing the Work as originally contracted or as subsequently adjusted by Field Alterations.

**1.24. Contract Time.** The total time allowed the Contractor for completion of the Work.

**1.25. Contractor.** The individual, firm or corporation or any combination thereof, Party of the Second Part, with which the contract is made by the City.

**1.26. Controlled Access Highway.** Any highway to or from which access is denied or controlled, in whole or in part, from or to abutting land or intersecting streets, roads, highways, alleys or other public or private ways.

**1.27. Control of Access.** The condition where the right to access of owners or occupants of abutting land or other persons in connection with a highway is fully or partially controlled by public authority.

**.1 Full Control.** Full control of access means that the authority to control access is exercised to give preference to through traffic by providing access connections with selected public roads only and by prohibiting crossings at grade or direct private driveway connections.

**.2 Partial Control.** Partial control of access means that the authority to control access is exercised to give preference to through traffic to a degree that, in addition to access connections with selected public roads; there may be some crossings at grade and some private driveway connections.

**1.28. County.** A political subdivision of the State.

**1.29. Culvert.** Any structure, other than a bridge, which provides an opening under a roadway for drainage or other purposes.

**1.30. Debar (Debarment).** To disqualify (the disqualification of) a Contractor from bidding on or entering into a contract, or from participating as a Contractor or Subcontractor.

**1.31. Department.** The Department of Public Works, City of San Antonio, Texas.

**1.32. Departmental Material Specifications.** Specifications for various materials published by the Materials and Pavement Section of the Construction Division of TxDOT. Departmental Material Specifications are now referred to as DMS-XXXX in lieu of D-9-XXXX.

**1.33. Disadvantaged Business Enterprise (DBE) Joint Venture.** A DBE firm and one or more other firm(s) to carry out a single business enterprise for profit for which purpose they combine their property, capital, efforts, skills and knowledge, and in which the DBE is responsible for a distinct, clearly defined portion of the work of the contract and whose share in the capital contribution, control, management, risks and profits of the joint venture are commensurate with its ownership interest.

**1.34. Disadvantaged Business Enterprise.** A small business concern, certified through the Texas Unified Certification Program in accordance with 49CFR Part 26, which is fifty-one (51) percent owned by one or more minorities or women, or in the case of a publicly owned business, at least fifty-one (51) percent of the stock is owned by one or more minorities or women, and whose management and daily business operations are controlled by one or more such individuals.

**1.35. Disadvantaged Business Enterprise Liaison Officer (DBELO).** The individual responsible for implementing all aspects of the Disadvantaged Business Enterprise Program for the City of San Antonio.

**1.36. Engineer.** The City Engineer, or his duly authorized representative, either or both being a duly authorized representative of the Director of Public Works.

**1.37. Expressway.** A divided arterial highway for through traffic with full or partial control of access and generally with grade separations at intersections.

**1.38. Federal-Aid Contract.** Any contract between the City/State and a Contractor, which is paid for in whole or in part with U. S. Department of Transportation (DOT) financial assistance.

**1.39. Field Alteration.** A written order issued by the City to the Contractor authorizing additions, deletions, or revisions to the Work to be performed by Contractor within the general scope of construction services outlined in the Contract Documents.

**1.40. Freeway.** An expressway with full control of access.

**1.41. Frontage Street or Frontage Road.** A local street or road auxiliary to and located along an arterial highway for service to abutting property and adjacent areas and for control of access (sometimes known as a Service Road, Access Road or Insulator Road).

**1.42. Hazardous Materials/Waste.** Hazardous materials/waste include, but are not limited to, such materials as: explosives, compressed gas, flammable liquids, flammable solids, combustible liquids, oxidizers, poisons, radioactive materials, corrosives, etiologic agents and other material classified as hazardous by 40CFR261, or applicable state and federal regulations.

**1.43. Highway, Divided.** A highway with separate roadways intended to move traffic in opposite directions.

**1.44. Highway, Street or Road.** General terms denoting a public way for purposes of vehicular travel, including the entire area within the right of way. Recommended usage: in urban areas is highway or street and in rural areas is highway or road.

**1.45. Inspector.** The person assigned by the Engineer to inspect any or all parts of the work and the materials to be used therein. (Same as COI)

**1.46. Intersection.** The area embraced within the prolongation or connection of the lateral curb lines, or, if none, then the lateral boundary lines of the roadways, of two highways which join one another at, or approximately at, right angles; or the area within which vehicles traveling upon different highways joining at any other angle may come in conflict.

**1.47. Island.** An area within a roadway for which vehicular traffic is intended to be excluded, together with any area at the approach thereto occupied by protective deflecting or warning devices.

**1.48. Invitation for Bids (IFB).** A published notice that the City will be accepting bid proposals on a project. The notice states the project name, where the project plans and specifications can be obtained, the cost of the plans and specifications, when and where the bid proposals are to be submitted.

**1.49. Laboratory.** The testing laboratory that may be designated or approved by the Director of Public Works.

**1.50. Local Street or Local Road.** A street or road primarily for access to residence, business or other abutting property.

**1.51. Major Bid Item.** Any individual Bid Item submitted by Contractor that constitutes a five (5) percent minimum of the total Contract Sum proposed by the successful low Bidder Contractor. In spite of the general criteria above, the Owner and Consultant reserve the right to identify or exclude specific Bid Items as being "Major" in the Contract Documents for each Project.

**1.52. Major Street or Major Highway.** An arterial highway with intersections at grade and direct access to abutting property, and on which geometric design and traffic control measures are used to expedite the safe movement of through traffic.



**1.53. Manual of Testing Procedures.** Texas Department of Transportation Division of Materials and Tests manual outlining testing methods and procedures.

**1.54. Materials.** Definitions of materials and material properties are as found in Test Method Tex-100-E, Part I.

**1.55. Mathematically Unbalanced Bid.** A bid containing lump sum or unit bid items, which do not reflect reasonable actual costs plus a reasonable proportionate share of the Bidder's anticipated profit, overhead costs and other indirect costs.

**1.56. Materially Unbalanced Bid.** A bid which generates a reasonable doubt that award to the Bidder submitting a mathematically unbalanced bid will result in the lowest ultimate cost to the Owner.

**1.57. Median.** The portion of a divided highway separating the traffic lane(s) in opposite directions.

**1.58. Nonhazardous Recyclable Material.** A material that has been recovered or diverted from the nonhazardous waste stream for purposes of reuse or recycling in the manufacture of products that may otherwise be produced using raw or virgin materials.

**1.59. Nonresident Bidder.** A Bidder whose principal place of business is not in Texas; includes a Bidder whose ultimate parent company or majority owner does not have its principal place of business in Texas.

**1.60. Owner.** See "City."

**1.61. Owner's Representative.** The Director of Public Works or his Designee.

**1.62. Pavement.** That part of the roadway having a constructed surface for the facilitation of vehicular traffic.

**1.63. Payment Bond.** The security furnished by the Contractor through the Surety in the full amount of the Contract Sum for the protection of all persons supplying labor and material in the prosecution of the Work who properly follow statutory requirements for perfecting claims against such security.

**1.64. Performance Bond.** The security furnished by the Contractor through the Surety in the full amount of the Contract Sum as a guaranty that the Work will be faithfully performed and completed and that the Owner will be saved harmless from all costs and damages which the Owner may suffer by reason of the Contractor's default or failure to perform the Work.

**1.65. Plans.** The Plans, drawings, details and supplemental drawings, or reproductions thereof, produced and sealed by the Consultant and approved by the Owner, showing the location, character, dimensions and details of the Work and which are a part of the Contract. Plans include standard details issued and sealed by the City Engineer or his representative.

**1.66. Power of Attorney for Surety Bonds.** An instrument under corporate seal, which appoints an attorney-in-fact to act in behalf of a Surety Company in signing bonds.

**1.67. Project.** Work site and Work elements with all appurtenances and construction to be performed thereon under the Contract.

**1.68. Bid Proposal.** The offer of the Bidder, made out in duplicate on the prescribed forms, giving prices for performing the work described in the plans and specifications.

**1.69. Bid Proposal Guaranty.** The security designated in the bid proposal and furnished by the Bidder as a guaranty that the Bidder will enter into a contract if awarded the work.

**1.70. Ramp.** A section of highway over which traffic passes for the primary purpose of making connections

with other highways.

**1.71. Registered Professional Engineer.** A person who has been duly licensed and registered by the Texas State Board of Registration for Professional Engineers to engage in the practice of engineering in this state.

**1.72. Rental Rate Blue Book for Construction Equipment.** Equipment rental rates published by Dataquest (also known as the Rental Rate Blue Book or the Blue Book).

**1.73. Right of Way.** The land provided for a highway, street or road.

**1.74. Roadbed.** The graded portion of a highway, which is prepared as foundation for the pavement structure and shoulders. On divided highways, the depressed median type and the raised median type highways will be considered to have two roadbeds. Highways with a continuous two-way left turn lane will be considered to have one roadbed.

**1.75. Roadway.** The portion of the highway within the limits of construction.

**1.76. Samples.** Physical examples furnished by the Contractor to Owner to illustrate intended or anticipated materials, equipment or workmanship, and to assist Owner and Consultant in the establishment of workmanship and quality standards by which the Work will be judged.

**1.77. Sequence of Construction.** The logical and proper order in which the Contractor shall accomplish the Work by Owner directed stages and phases, as shown in the Contract Documents, unless Owner orders otherwise by a properly executed Field Alteration.

**1.78. Screens and Sieves.** As defined by the ASTM.

**1.79. Shop Drawings.** Drawings, diagrams, illustrations, schedules, performance charts, brochures and other data which are furnished by the Contractor and prepared by Contractor which illustrates and details some portion of the Work.

**1.80. Shoulder.** That portion of the roadway contiguous with the traffic lane(s) for accommodation of stopped vehicles for emergency use and/or for lateral support of base and surface courses.

**1.81. Special Provisions.** Additions and/or revisions to the Standard Specifications or Special Specifications.

**1.82. Special Specifications.** Supplemental Specifications applicable to the individual project, not covered by the Standard Specifications.

**1.83. Specifications.** The specific instructions to the Contractor as to the requirements for materials, equipment, certain construction systems, standards and quality of workmanship for the Work and performance of related services and forming a part of the Contract. Where the phrases such as "or directed by the Engineer", "or as approved by the Engineer" or "or to the satisfaction of the Engineer" occur, it is understood that the directions, orders or instructions to which they relate are within the limitations of and authorized by the contract. Special provisions and special specifications will cover work pertaining to a particular project and included in the bid proposal but not covered by the Standard Specifications. Where reference is made to Departmental Material Specifications, specifications of ASTM, AASHTO or Bulletins and Manuals of the Department, it shall be construed to mean the latest standard or tentative standard in effect on the date of the bid proposal. Incorporation of subsequent changes to the above documents will be considered by the Engineer in accordance with Item 4, "Scope of Work," as appropriate.

**1.84. State.** The State of Texas.

**1.85. Subcontractor.** An individual, partnership, limited liability company, corporation or any combination thereof to which the Contractor sublets, or proposes to sublet, any portion of a contract.

**1.86. Subgrade.** That portion of the roadbed upon which the subbase, base or pavement structure is to be placed.

**1.87. Substantial Completion.** The date certified by the Owner when the Construction of the Project or a specified part thereof is sufficiently completed in accordance with the Contract Documents so that the Project, or specified part thereof could be utilized for the Owner's purposes for which it is intended.

**1.88. Substructure.** That part of the structure below the bridge seats or below the springing lines of arches. Parapets, backwalls and wingwalls of abutments shall be considered as parts of the substructure.

**1.89. Superintendent.** The on project site representative of the Contractor authorized to receive and fulfill instructions from the City's Construction Observer/Inspector ("COI"). The Superintendent or his designee shall supervise and direct the construction Work.

**1.90. Superstructure.** That part of the structure above the bridge seats or above the springing lines of arches.

**1.91. Surety.** The corporate body licensed to conduct business in the State of Texas that provides assurance that the Contractor, or his substitute will faithfully perform the Work covered by the Contract and make payment of any due, unpaid, eligible labor and supply claims arising there under.

**1.92. Temporary Structures.** All temporary bridges, culverts and structures required to maintain traffic during the construction of work.

**1.93. Texas Commission on Environmental Quality (TCEQ).** Texas Natural Resource Conservation Commission (TNRCC) has changed its name to TCEQ. Therefore all references to TNRCC now refer to TCEQ.

**1.94. Texas Unified Certification Program (TUCP).** A "one stop" certification process for Disadvantaged Business Enterprises (DBE's).

**1.95. THD Test Method (TxDOT).** Materials and Test Division manual outlining testing methods and procedures.

**1.96. TMUTCD.** Texas Manual on Uniform Traffic Control Devices for Streets and Highways.

**1.97. Traffic Lane.** The strip of roadway intended to accommodate the forward movement of a single line of vehicles.

**1.98. Traveled Way.** The portion of the roadway for the movement of vehicles, exclusive of shoulders and auxiliary lanes.

**1.99. Underground Facilities.** All pipelines, conduits, ducts, cables, wires, manholes, vaults, tanks, tunnels or other such facilities or attachments, and any encasements containing such facilities which have been installed underground to furnish any of the following services or materials: electricity, gases, steam, liquid petroleum products, telephone or other communications, cable television, water, sewage and drainage removal, traffic or other control systems.

**1.100. Unit Price Work.** Work to be paid for by Owner on the basis of Contractor quoted unit prices in the Bid Proposal based upon Owner estimated quantities.

**1.101. The Work.** The work shall include the furnishing of all labor, materials, equipment and other incidentals necessary or convenient to the successful completion of the project and the carrying out of all the duties and obligations imposed by the contract.

**1.102. Work Element Pay Item.** An Item for which a unit cost is requested.

**1.103. Working Day (Calendar Day Schedule).** This is a seven (7) calendar days per week definition. A

working day is defined as a calendar day, not including City holidays as designated by City Council each fiscal year in October.

.1 Time will be charged for all working days regardless of weather conditions, materials, or supplies, which could impede the prosecution of the work.

.2 The Engineer may suspend the work and the "Time Charge" in accordance with Article 8.6, "Suspension of Work by Owner" when conditions not under the control of the Contractor, other than those described above, prohibit the performance of the critical activity or activities which control the completion of the project as determined by the schedule submitted in accordance with Article 8.1, "Prosecution of Work."

.3 The Engineer may suspend the work and the "Time Charge," in accordance with Article 8.6, on any holiday, on the day(s) preceding the holiday and/or on the day(s) following the holiday if the Engineer and the Contractor mutually agree the Contractor should not work. Such suspension shall be based upon (a) past experience as to the volume of holiday traffic that may be expected and (b) the hazard that project operations would present to the traveling public and/or the Contractor's personnel.

.4 Work on City holidays will not be permitted except with the written permission of the Engineer. If work on City holidays is permitted, working time will be charged on the same basis as described above.

**1.104. Written Notice.** Shall be considered to have been duly given if delivered in person to an authorized representative of the Contractor or Owner, or to an officer of the corporation for whom it is intended, or if delivered at, or sent by registered or certified mail to the last business address known to the person who gives the notice.

## ITEM 2

### INSTRUCTIONS TO BIDDERS LOCAL AGENCY MANAGED PROJECTS (LAM)

**2.1. Introduction.** The 2004 Specifications for the General Provisions (Items 1 – 9) are written in passive voice, indicative mood. The Special Provisions for the General Provisions are written in active voice, imperative mood. The subject of imperative sentences is understood to be “The Contractor.” Phrases such as “as approved,” “unless approved,” “upon approval,” “as directed,” “as verified,” “as ordered,” and “as determined” refer to actions of the Engineer unless otherwise stated, and it is understood that the directions, orders, or instructions to which they relate are within the limitations of and authorized by the Contract.

**2.2. Bid Proposal Documents.** Sealed bid proposals and other required documents will be received at the Office of the City Clerk (City Hall, 100 Military Plaza, 2<sup>nd</sup> Floor, San Antonio, Texas), as set forth in the Invitation for Bids (IFB). Information and Bidding documents are obtainable from the Consultant as set forth in the published IFB. Bidding documents are also on file in the Office of Plans and Records (Municipal Plaza Building, 9<sup>th</sup> Floor, 114 W. Commerce).

.1 The following documents constitute the required information to be submitted as a part of the bid proposal:

- a. Envelope #1, furnished by the City shall contain:
  - Bid document and any alternate bids
- b. Envelope #2, furnished by the City, shall contain:
  - Bid bond or cashiers check
  - Assurance of Compliance with Equal Employment Opportunity Statement
  - Certificate of Non-Segregated Facilities
  - Statement on President’s Executive Order
  - Addenda Acknowledgement Form
  - Disclosure for Lobbying Activities
  - Child Support Statement
  - Certificate of Non-Collusion
  - Certificate of Interest In Other Bid Proposals For This Work
  - Litigation Disclosure Form

The envelopes furnished by the City shall be clearly marked with the name of the project for which bids are to be submitted.

**2.3. Bid Proposal Forms.** The Bid shall be submitted in duplicate on Bid Proposal Forms provided with the specifications. Envelope #1 shall contain the Bid Proposal and shall be clearly identified as: Bid Proposal For: \_\_\_\_\_

Envelopes #1 and #2 will be received in the Office of the City Clerk until 1:00 p.m. on \_\_\_\_\_. All envelopes will be opened and publicly read aloud at 1:00 p.m. Any Bids received after that will be returned unopened. The City reserves the right to reject any and all Bids and waive any formalities.

**2.4. Bidder Findings of Discrepancies or Ambiguities.** Prospective Bidders shall notify Consultant and Owner in writing at least five (5) calendar days prior to scheduled Bid Opening date if discrepancies and ambiguities or omissions are found in the Project Plans and/or Specifications, or if further information or interpretation is desired.

**2.5. Addenda.** Answers by Consultant and/or Owner will be given in writing to all prospective Bidders in Addendum form. All provisions and requirements of such addenda will supersede or modify affected portions of the Project Plans and/or Specifications. All addenda will be incorporated in and bound with the Contract Documents. No other explanation or interpretation will be considered official or binding upon the Owner.

**.1 Addendum Acknowledgement Form.** The Contractor's submitted Bid Proposal shall be based on Contractor's investigation and knowledge of the conditions at the Project site, the Specifications, the Plans and any Addenda to the Specifications and/or Plans issued during time of advertisement prior to bidding. The Bidders shall sign and submit the Addendum Acknowledgement Form with the Bid Packet.

**2.6. Bid Proposal to City of San Antonio (Form 9-12).** The bid proposals shall be submitted in duplicate on Form 9-12 (Rev. May 2003), "Bid Proposal to City of San Antonio." The envelope containing any Bid Proposal and other documents shall be endorsed as stipulated in the Invitation For Bids.

**2.7. Proposal Guaranty.** Unless the bid is under \$25,000, an original Bid Proposal Guaranty issued by a corporate surety company licensed to do business in the State of Texas and payable to the order of the City of San Antonio, Texas, in an amount of not less than five (5) percent of the greatest total amount of the Bid Proposal, must accompany each bid as a guarantee that if awarded the Contract the successful Bidder will promptly enter into a Contract and execute bonds on the standard forms provided, as outlined in the specifications and Contract Documents.

**.1 For Bids Less Than \$25,000.** Bidders shall submit either a cashier's or certified check in lieu of the Bid Bond only if the bid amount is less than \$25,000.

**2.8. Omissions in Bid Proposals.** Bid proposals will be submitted in duplicate copy on the City forms furnished, except as provided below. Bid proposals containing omissions (except in unit prices as described in Article 2.12), alterations of City's wording contained in Contract Documents, conditional bids or qualifications, which modify the Bidder's bid proposal from the Owner's IFB, will be rejected as non-responsive.

**2.9. Computer Printout For Unit Prices.** Bidders, at their option, in lieu of hand writing the unit prices in words in ink on the bid proposal form, may submit an original computer printout sheet bearing certification by and authorized signature for the bidding firm. The unit prices shown on acceptable printouts will be unit prices used to tabulate the bid and used in the contract if awarded by the City. As a minimum, computer printouts must contain the information and in the arrangement shown on the "Example of Bid Prices Submitted by Computer Printout" form at the end of this section. Bid proposals with unit prices by computer printout will be considered as non-responsive if:

- a. The bid proposal does not bear the certification verbatim, as shown on the example in the bid proposal.
- b. The computer printout does not have an authorized signature on behalf of the firm proposing the bid.
- c. The computer printout omits or alters required bid items or includes items not shown in the bid proposal.
- d. The bid proposal issued by the City is not fully executed as provided above.

**.1** If the bid proposal, submitted by the Bidder, contains both the form furnished by the City and a computer printout, completed according to the instructions, only one will be considered. In this situation, the bid prices shown on the computer printout will be used to determine the bid.

**2.10. Bid Alternates.** Bidders shall submit a unit price for each Work element pay item for which a bid is requested, except in the case of an alternate. In such a case, the procedure is as follows:

**.1 Additive Alternate.** In the case of Additive Alternates, unit prices must be submitted for the base bid and the items in all proposed additive alternates.

**.2 Substitute Alternate.** In the case of a Substitute Alternate (these alternates appear in sets of two or more related alternates), unit prices must be submitted for all the items in the base bid and for all the items in one of the related substitute alternates in each set.

**2.11. Extensions in Unit Prices.** The unit price shall be inserted on the Bid Proposal sheet in words (not figures) in the "DESCRIPTION AND UNIT PRICE BID" column. Extensions, which are the unit prices multiplied

by the approximate quantities for each item, shall be inserted in figures in the "EXTENSION" column. Bids shall be submitted only on the City's bid proposal form or approved computer printout sheets. Bids not so submitted will be considered non-responsive. Conditional bids will also be considered non-responsive.

**2.12. Blank Unit Prices.** All applicable blank spaces in the Bid Proposal Form shall be completed. The Signature shall be in longhand. Any interlineation, alteration or erasure must be initialed by the signatory on the Bid Proposal. In the event additional or extra blank spaces remain after completion of the various forms, Contractor shall enter the terms "none" or "not applicable" on any remaining blank spaces to indicate that the Contractor has considered City requests for information on every line presented. Any blank unit prices will be tabulated and evaluated as "no cost" to the City.

**2.13. Signature Requirement.** Each copy of the Bid shall include the legal name of Bidder and a statement whether Bidder is a sole proprietor, a partnership, or corporation, or any other legal entity, and each copy shall be signed by the person or persons legally authorized to bind the Bidder to a Contract. A Bid by a corporation shall further give the state of incorporation and affix the Corporate Seal thereto. A Bid submitted by a corporate agent for Bidder shall be accompanied by a valid Power of Attorney, attached, certifying the agent's authority to bind Bidder.

**2.14. Amendments Past Bid Opening.** Bid proposal amounts may not be amended or modified in any manner after the time set for the bid opening in the published IFB.

**2.15. Right To Reject Bids.** The City expressly reserves the right to reject any or all Bid Proposals submitted, to interpret any Bidder ambiguities to the City's advantage.

**.1 Reasons For Determining Bids Non-Responsive.** Any proposal that has one or more of the deficiencies listed in Articles 2.8, 2.9, 2.11 or below will be considered non-responsive and will not be read publicly.

- a. The person or, in the case of a joint venture, persons do not sign the proposal.
- b. The proposal guaranty does not comply with the requirements contained in Article 2.7, "Proposal Guaranty."
- c. The proposal is in a form other than the official proposal form issued to the Bidder or Bidders or acceptable computer printout.
- d. The proposal was not in the hands of the letting official at the time and location specified in the advertisement.
- e. The proposal submitted has the incorrect number of items.
- f. A computer printout, when used is not signed in the name of the Bidder (or joint Bidders, in the case of a joint venture), is not in the proper format, or omits required Items or includes an Item or Items not shown in the proposal.
- g. The Bidder submits more than one proposal, under the same or different name, for a specific proposed Contract. (A Bidder may submit a bid proposal and participate as a material supplier, subcontractor or both to any or all Bidders contemplating submitting a proposal for this work.)
- h. The Bidder fails to acknowledge or improperly acknowledges receipt of all addenda issued.
- i. The Bidder modifies the proposal in a manner that alters the conditions or requirements for work as stated in the proposal form.
- j. The Bidder did not attend a specified mandatory pre-bid conference.

**2.16. Termination of Bid.** No Bid shall be withdrawn or terminated by Bidder without consent of the Owner for a period of ninety (90) calendar days after the opening of bids by the City.

**2.17. Bid Proposal Guaranties of Three Lowest Bidders.** Bid proposal guarantees of the first, second and third low Bidders will be retained until after the Contract Agreement and Bonds have been executed. Bid Proposal Guaranties in the form of any certified or cashier's check of all except the three lowest Bidders will be returned by mail to unsuccessful Bidders upon certification of the three low Bidders, unless there is a justifiable reason for Owner to hold them for the full ninety (90) calendar day period.

**2.18. Time Requirement.** Bid Proposals received after the time specified in the IFB will be ineligible for opening and will be returned unopened to the prospective Bidder.

**2.19. Prospective Bidders' Field Examination.** Each Bidder shall satisfy himself by personal field examination of the location of the proposed Work, and by any other means to enable him to develop his Bid Proposal intelligently and to his advantage. The Bidder shall make himself familiar with all of the Contract Documents and other Owner instructions including Bidder's ability to submit Pre-Bid inquiries to Owner and Design Consultant before submitting his Bid Proposal in order that no Contractor misunderstanding shall exist in regard to the nature and character of the Work to be performed. No allowance will be made by the City for any Bidders to claim that the Bid Proposal is based upon incomplete information as to the nature and character of the site or the Work involved. The submittal of the Bid by Bidder shall constitute an admission by the Bidder that he has carried out the foregoing stipulations to his entire satisfaction.

**2.20. Bidder Inquiry Notification.** After investigating the Project site and comparing the Plans and Specifications and other Contract Documents with the existing conditions, the prospective Bidder should immediately notify the Consultant of any conditions for which the requirements of labor and materials are not clear, or about which there is any prospective Bidder question regarding the quantity and extent of the Work involved. Bidder inquiry notifications to the Owner and/or Consultant must be made in writing at least five (5) calendar days prior to the scheduled Bid opening date.

**2.21. Reasonable Work Site Investigation.** It is understood and acknowledged by Bidder that full and complete allowance for conditions under which the Contractor will be required to perform construction, or that will in any manner affect Work under this Contract, are included in the Bidder's Bid Proposal and reflected in the proposed Contract Sum. A soils investigation (if applicable) may have been conducted as a potential aid to the Consultant in preparation of the Contract Plans and Specifications. **THIS INFORMATION IS AVAILABLE TO PROSPECTIVE BIDDERS WITHOUT EXPRESS OR IMPLIED REPRESENTATION, ASSURANCE, WARRANTY OR GUARANTEE BY OWNER OR CONSULTANT THAT IT IS COMPLETE OR CORRECT OR THAT IT REPRESENTS A TRUE, OR APPROXIMATELY TRUE, PICTURE OF THE SUB-SURFACE CONDITIONS TO BE ENCOUNTERED ACROSS THE PROPOSED WORK SITE. THIS INFORMATION IS SPECIFICALLY NOT PART OF THE CONTRACT DOCUMENTS.** This information is available to prospective Bidders for review at the Project Consultant's office. Copies may be purchased from the Consultant. This Bidder cost is non-refundable. Before submitting his Bid, each Bidder may, at his own expense, make reasonable Work site investigations and tests as the Bidder may deem necessary to determine his Bid for performance of the Work in accordance with the Contract Documents. Access for such investigations and tests must be reasonably coordinated with the Owner.

**2.22. Child Support Order Compliance.** A child support obligor who is more than thirty (30) days delinquent in paying child support and a business entity in which the obligor is a sole proprietor, partner, shareholder or owner with an ownership interest of at least twenty-five (25) percent is not eligible to receive payments from state funds under a contract to provide property, materials, or services; or receive a state-funded grant or loan.

.1 By signing the contract, the Contractor, under penalty of perjury under the laws of the State of Texas, certifies that the sole proprietor, partner, shareholder or owner of the firm is not thirty (30) or more days delinquent in providing child support.

.2 By signing the contract, the Contractor makes material representation of fact upon which reliance is placed as the Department enters into the contract. If it is later determined that the Contractor knowingly rendered an erroneous representation, in addition to other remedies available, the Department may terminate the contract for cause or default.

.3 The Contractor shall provide immediate written notice to the Department if at any time it learns that its representation was erroneous when submitted or has become erroneous by reason of changed circumstances.



City of San Antonio / Public Works

Project Name: \_\_\_\_\_  
Job # \_\_\_\_\_

ITEM NO.	BID ITEM DESCRIPTION	UNIT OF MEASURE	APPROX. QUANTITIES	UNIT PRICE	AMOUNT	SEQUENCE NUMBER
100	MOBILIZATION	LS		\$101,974	\$101,974	1
101	PREPARATION OF RIGHT -OF- WAY	LS		\$936	\$936	2
105	CHANNEL EXCAVATION	CY	5963	\$3.56	\$2,228.28	3

NOTE: To help the bid tabulation process, please skip a line after the eleventh item, the twenty-second item, and after succeeding multiples of eleven.

TOTAL BID AMOUNT \_\_\_\_\_

NOTE: CERTIFICATION STATEMENT TO APPEAR ON LAST PAGE ONLY.

(YOUR FIRM'S NAME) certifies that the unit prices shown on this complete computer print-out for all the bid items and the alternates contained in this proposal are the unit prices intended and that its bid will be tabulated using these unit prices and no other information from this print-out. (YOUR FIRM'S NAME) acknowledges and agrees that the total bid amount shown will be reached by totaling the total bid and further agrees that the total bid amount will be determined by multiplying the unit bid prices shown in this print-out by the respective estimated quantities shown in the proposal and then totaling all the extended amounts.

Signed: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

EXAMPLE OF BIDS PRICES SUBMITTED BY COMPUTER PRINTOUT

## ITEM 3

### AWARD AND EXECUTION OF CONTRACT

**3.1. Right of the Owner.** The Owner may make such investigations as he deems necessary to determine the ability and responsibility of the Bidder to perform the Work, and the Bidder shall furnish to the Owner reasonable information and data (including Financial Statement) for this purpose as the Owner may reasonably request. The Owner reserves the right to reject any bid if the evidence submitted by, or investigation of, such Bidder fails to satisfy the Owner that such Bidder is responsible to carry out the obligations of the Contract and to complete the Work contemplated therein.

**3.2. Performance Evaluation System.** The City has implemented a Contractor performance evaluation system. The evaluation will cover: accomplishment of the Project with adequate manpower, ability to meet schedule, adequacy of materials and equipment; citizen complaint response; adjacent-to-Project, property Owner relations; and attendance at public Project meetings. The Contractor's evaluation history may also be used by the City Staff as a basis for recommendations of award to the City Council.

**3.3. Time for Awarding Bid.** The City agrees that should the Contract be awarded, it will be awarded within ninety (90) calendar days of the Bid opening date, unless otherwise stated in the Owner's IFB.

**3.4 Awarding Bid.** The City shall award the Contract to the lowest responsive and responsible Bidder. The City reserves the right to reject any or all proposals and to waive technicalities in the best interest of the City.

**.1 Determining Low Bidder.** If no additive alternates are included in the Bid, the City shall award the Contract to the lowest total Bidder. If there are additive/deductive alternates included, they will be considered in the numerical order given in the Bid. The City shall award the Contract to the Bidder with the lowest total bid which includes the base and any selected additive/deductive alternates. NOTE: Alternate #1 must be selected before Alternate #2, Alternate #2 before #3 and so on.

**.2 Tie Bids.** If the official total bid amount for two (2) or more Bidders is equal and those bids are the lowest submitted, each tie Bidder shall be given an opportunity to withdraw their bid. If two (2) or more Bidders do not withdraw their bids, the low Bidder shall be determined by a coin toss. If all tie Bidders request withdrawal of their bids, no withdrawals shall be allowed and the low Bidder shall be determined by a coin toss.

**3.5 Construction Contract.** The successful Bidder will be required to execute and return a Construction Contract prepared and supplied by the City within twenty (20) calendar days after the date appearing on the City's forwarding cover letter that transmits the Contract Documents sent by Owner to Contractor and he will further be required to commence Project Work within seven (7) calendar days after City issuance of the written Authorization to Proceed.

**3.6. Bonds.** The successful Bidder to whom the Contract is awarded will be required to furnish a Performance Bond and a Payment Bond, issued by a corporate surety company licensed to conduct business in the State of Texas, for the Contract Sum as set forth in the IFB. Substitute originals provided by the City shall be used by Contractor and his surety in submitting the actual Project Bonds to the City.

**3.7. Performance Bond.** Contractor hereby agrees to execute with corporate sureties and deliver to the City, at once, a "Performance Bond" from a City-approved surety in the total amount of the Contract Sum, approved by the City as to form and general sufficiency, conditioned that Contractor shall faithfully perform, observe and comply with all the terms, conditions and stipulations, undertakings and provisions of the Contract Documents.

**3.8. Payment Bond.** Contractor hereby agrees to execute with corporate sureties and to deliver to the City, at once, a "Payment Bond" from a City-approved surety in an amount at least equal to the Contract Sum, such as shall be satisfactory to the City as to form and general sufficiency, as security for the payment of all persons supplying labor and material in the prosecution of the Work provided for in the Contract Documents.

**3.9. Contractor and Sureties Still Bound.** No assignment, transfer or subletting, without the written consent of said City, and no order of said City for or approval of any alterations or modifications in said Specifications, Plans, or Work, and no change in the requirements or order for extra work made by the City as provided in this Contract, shall ever in any manner release or diminish the responsibility of Contractor or any Surety on any bond of Contractor, but on the contrary, such responsibility shall extend to and comprehend all such changes and other matters. If any Surety upon any bond furnished in connection with the Contract becomes insolvent, or otherwise not authorized to do business in this State, the Contractor shall within forty-five (45) calendar days furnish equivalent substitute forms of security while seeking substitute bonding, to protect the interests of the City and of persons supplying labor or materials in the prosecution of the Work contemplated by the Contract, or may be liable for breach of Contract and default termination.

**3.10. Certificates of Insurance.** Before starting Work, the successful Bidder to whom the Contract is awarded will be required to furnish Owner with original Certificates of Insurance Coverage as set forth in Item 7 and any Special or Supplemental Conditions that may be applicable.

**3.11. Workers Compensation Coverage.** Prior to award of the Contract, the apparent successful Bidder shall be required to provide certificates of workers compensation coverage through a group plan or other method satisfactory to the Owner as set forth in Item 7 and the Texas Workers Compensation Commission, rule 110.110.

**3.12. Execution and Approval of Contract.** The contract will be approved and signed under authority of the City Council and the City Manager or designee.

**3.13. Failure to Execute Contract, Bonds, Certificate of Insurance, Furnishing Ownership Information, DBE/HUB Information and the List of Quoting Suppliers and Subcontractors.** Should the Bidder to whom the contract is awarded refuse or neglect to execute and file the contract, bonds, Certificate of Insurance, furnish ownership information, DBE/HUB information and the list of quoting suppliers and subcontractors within twenty (20) calendar days after written notification of the award of the contract, the bid proposal guaranty filed with the bid shall become the property of the Owner, not as a penalty, but as liquidated damages. A Bidder who forfeits his bid proposal guaranty in accordance with this Article will not be considered in future bid proposals for the same work unless there has been a substantial change in design of the project subsequent to the forfeiture of the bid proposal guaranty. In addition, the City may impose sanctions against the Bidder for failure to enter into the contract or honor the bid proposal guaranty.

**3.14. Beginning of Work.** The Contractor shall not begin work until authorized by the Owner in writing to do so. Authorization notification will be by work project authorization.

**3.15. Antitrust.** The successful Bidder, by virtue of signing the contract, assigns to the City any and all claims for overcharges associated with the contract, which arise under the antitrust laws of the United States, 15 U.S.C.A., Section 1, et seq. (1973).

## ITEM 4

### SCOPE OF WORK

**4.1. Intent of the Contract Documents.** The intent is to describe a functionally complete Project (or integral component part thereof) to be constructed in accordance with the Contract Documents. Any work, materials or equipment that may reasonably be inferred from the Contract Documents, as being required to produce the intended result will be supplied by Contractor whether or not specifically called for by City or its Consultant. When words, which have a well-known technical or trade meaning, are used to describe work, materials or equipment, such words shall be interpreted in accordance with that meaning. Where phrases "directed by", "ordered by", "to the satisfaction of", "the Consultant" or "the City's Construction Observer/Inspector" (COI) occur, it is to be understood that the directions, orders, or instructions to which they relate are within the scope of, and authorized by the Contract Documents. Reference to standard specifications, manuals or codes of any technical society, organization or association, or to the Laws or Regulations of any governmental authority, whether such reference be specific or by implication, shall mean the latest standard specification, manual, code or Laws or Regulations in effect at the time of opening of Bids except as may be otherwise specifically stated.

**4.2. Changes in The Work.** The Contract Sum and/or the Contract Time may be increased or decreased only by written Field Alteration. A Field Alteration signed by the Contractor indicates his acceptance and approval thereof including the adjustment in the Contract Sum and/or the Contract Time. The Owner, without invalidating the Contract, may order changes in the Work within the general scope of the Contract and applicable law consisting of additions, deletions or other revisions and the Contract Sum and/or the Contract Time will be adjusted accordingly. All such changes in the Work shall be authorized by written Field Alteration and shall be performed by Contractor under the applicable provisions of the Contract Documents.

**.1 Major Changes In The Work.** Any significant change in a Major Bid Item constitutes a major change in The Work and shall be implemented by a Field Alteration that shall be binding on the Owner and Contractor. A significant change shall be defined as follows:

- a. An increase or decrease of five (5) percent or more in the number of units of each Major Bid Item as included in the Consultant's estimated quantities included in the Bid Documents;
- b. An increase or decrease of five (5) percent or more in the dollar value of a lump sum, Major Bid Item.

Any change in the Contract Sum resulting from a major change in the work, which reflects among other things, quantity changes, market price changes, and any quantity/volume discounts that might apply, shall be determined as specified in Article 9.3.

**.2 Minor Changes In The Work.** The City's "COI" will have authority to order minor changes in the Work not involving an adjustment in the Contract Sum or Contract Time and not inconsistent with the intent of the Contract Documents. Such changes shall be implemented by a written directive and shall be binding on the Owner and Contractor. The Contractor shall carry out any undisputed written directive promptly.

- a. If the Contractor does not agree with the City's "COI" that a minor change in the work will result in no adjustment in Contract Sum or Contract Time, he must so notify the Owner in writing within seven (7) calendar days of issuance of the written directive.

**.3** If the City's "COI," Consultant, Owner and Contractor are unable to agree as to the extent, if any, of an increase or decrease in the Contract Sum or any extension or reduction of the Contract Time that should be allowed as a result of a disputed written directive or Field Alteration, the Contractor shall perform the disputed Work as requested by the Owner and a Contractor claim may be made.

**4.3. Extra Work.** Changes or Credits for the Work covered by an approved Field Alteration shall be determined by the method described in Articles 9.4 and 9.5.

**4.4. Limit to Extra Work.** The entire cost of extra Work resulting from Field Alterations including the incremental cost of extra Work resulting from any prior Field Alterations, modifications, or additions so ordered, shall not cumulatively exceed twenty-five (25) percent of the original Contract Sum, and provided further that the price is agreed upon in writing by Owner and Contractor before materials are furnished or the Work is done.

**4.5. Maintenance of Traffic.** The Contractor shall do such work as may be necessary to provide and maintain detours and facilities for safe public travel in accordance with the Traffic Control Plan and these specifications. There shall be provided and maintained in passable condition, as specified under Articles 7.7 and 7.10, such temporary roads and structures as may be necessary to accommodate public travel. Temporary approaches and crossings of intersecting highways shall be provided and maintained in a safe and passable condition by the Contractor at his expense. The Contractor will be responsible for the cost of normal maintenance of detours constructed under this contract. Any maintenance required to repair deterioration of the pavement structure due to faulty design will be at the expense of the City.

**.1** The City will be responsible for the cost of maintenance of existing streets, roadways or traffic control devices that are required to be used for detours or handling traffic, regardless of whether they are within or outside the project limits. Other existing streets, roadways or traffic control devices, which are damaged by the Contractor's operations, will be maintained and repaired by the Contractor at his expense.

**4.6. Final Cleanup.** The Contractor shall at all times keep the Project premises safe and free from accumulation of waste materials or rubbish caused by the Work under this Contract.

**.1 Final Inspection.** Upon completion of the Work and prior to the Owner's final inspection, the Contractor shall present the premises in a neat and clean condition, prepared for acceptance by Owner.

**.2 Restoration of Project Site.** Prior to final acceptance of the Work, the Contractor shall reasonably restore the Project site to its pre-Project condition (accounting for such restoration concerns as, but not limited to, cosmetic appearance, landscaping, drainage gradients, accessibility) to the extent permitted by the Project improvements. All of this incidental Work to be performed by Contractor to the satisfaction of the City's "COI."

**4.7 Disputes.** Prior to any anticipated litigation between the Owner and the Contractor, both hereby agree that disputed matters shall first be submitted to Owner administrative appellate procedures as described below:

**.1** Except as otherwise provided in this Contract, any dispute concerning a question of fact arising under this Contract which is not disposed of by mutual agreement shall be initially decided by the Owner (as represented by the decision of the Director of Public Works) who shall reduce his decision to writing and promptly mail or otherwise furnish a copy thereof to the Contractor. The decision of the Owner shall be final and conclusive unless within thirty (30) calendar days from the date of issuance of such decision by Owner the Contractor mails or otherwise furnishes to the Owner a written notice of appeal addressed to the City Manager, City of San Antonio, whose appellate decision on behalf of the City shall be the final and conclusive City decision. In connection with any appeal under this Article, the Contractor shall be afforded an opportunity to be heard and to offer evidence in support of the appeal to persons to be promptly appointed by the City Manager to review such disputed matters. The City department sponsoring the Project will also be allowed to present information supporting Owner's position.

**.2** Pending final City Manager decision after a dispute hearing, the Contractor shall proceed diligently with the performance of the Contract and in accordance with the City Manager's decision. Neither the City or the Contractor is precluded from resorting to litigation or other remedy at law or in equity to perfect a legal filing prior to the expiration of an applicable statute of limitations or after the Owner's administrative review process is completed.

**4.8. Claims for Additional Costs.** If the Contractor wishes to make a claim for an increase in the Contract Sum prior to final Contract Settlement, he shall give the Owner written notice thereof with a simultaneous information copy to the Consultant within sixty (60) calendar days after the Contractor knows, or should have

known, of the events giving rise to such Contractor claim. This notice shall be presented in writing to the Owner and Consultant by the Contractor before proceeding to execute the disputed Work, except in an emergency endangering life or property in which case the Contractor shall proceed in accordance with Article 7.7.4. No such Contractor claim shall be valid unless the Contractor follows the procedure outlined herein. If the Director of Public Works and the Contractor cannot agree on the amount of the adjustment in the Contract Sum, if any, it shall be determined by administrative procedures as provided below. Any change in the Contract Sum resulting from such claim shall be authorized by Field Alteration.

.1 If the Contractor claims that additional cost will be incurred because of, but not limited to, (1) any written Owner or Consultant interpretation of the Contract Documents, (2) any order by the Owner to stop the Work pursuant to Article 8.6 where the Contractor was not at fault, (3) any written order involving a perceived minor change in the Work issued pursuant to Article 4.2.2, the Contractor shall make such claim.

**4.9. Use of Materials Within the Right-Of-Way.** The Contractor, with the approval of the City's "COF" and Consultant, may use in the Work any suitable stone, gravel, or sand found in the excavation that otherwise meets or exceeds Contract Specifications. The Contractor shall not over excavate any material from within the right-of-way, which is not within the excavation limits, if any, as may be indicated by the lines and grades, without written authorization from the Director of Public Works.

**4.10. Salvageable Material.** Salvageable material as determined by the Specifications or the City's "COF" shall remain the property of the City and shall be relocated and stored by Contractor as directed by the City's "COF" provided that such relocation and storage does not increase the Contract Sum to Owner. Otherwise, Owner and Contractor may negotiate a Field Alteration to accomplish same.

## ITEM 5

### CONTROL OF THE WORK

**5.1 Plans and Specifications.** The plans and the accompanying specifications are essential parts of the Contract and a requirement occurring in one is as binding as though occurring in all. They are intended to be cumulative and complementary and to provide for a complete Work. In cases of disagreement, figured dimensions shall govern over scaled dimensions, detailed Plan Drawings and accompanying notations shall govern over General Plan Drawings, Specifications shall govern over Plan Drawings, and Special Conditions Provisions shall govern over Specifications and Plan Drawings.

**5.2 Conformity with Plans, Specifications and Special Provisions.** All work performed and all materials furnished shall be in reasonably close conformity with the lines, grades, cross sections, dimensions, details, gradations, physical and chemical characteristics of materials in accordance with tolerances shown on the plans or indicated in the specifications and special provisions. The limits establishing reasonably close conformity will be as defined in the respective items of the contract or if not defined, as determined by the Engineer.

.1 In the event the Engineer finds the work performed or the materials used are not within reasonably close conformity with the plans, specifications and special provisions, the affected material or product shall be removed and replaced or otherwise satisfactorily corrected by and at the expense of the Contractor.

.2 Any deviations from the plans and approved working drawings will be made only with the approval of the Engineer.

**5.3. Plans and Specifications at the Work Site.** The Contractor shall maintain at the Work site at least one copy of all Plans Specifications, Addenda, approved Shop Drawings and Field Alterations, in good order and marked to record all changes to the Plans and/or existing physical conditions made during construction.

**5.4. Superintendent.** The Contractor shall keep on-site a competent Superintendent or his designee and any necessary assistants for the duration of the project, all satisfactory to the Director of Public Works. Any Superintendent designee shall be identified in writing to the Director promptly after Owner-issued written Authorization to Proceed. The Superintendent or his designee shall represent the Contractor and all directions given to him shall be binding. Other Oral directions from the City representatives involving critical situations or Work elements shall be immediately confirmed in writing by Owner to the Contractor. Other oral directions shall be confirmed by Owner on written request in each case. The Contractor shall give sufficient supervision to the Work using his best skill and attention.

#### **5.5. Construction Staking and Layout.**

.1 The owner will have appropriate Temporary Bench Marks (TBM) and baseline (horizontal and vertical) established. As of the date of the notice to proceed, it will be the Contractor's responsibility to protect, preserve and reestablish (if required) the TBM and/or baseline. Construction staking and tolerances shall be in accordance with the "Manual of Practice for Land Surveying in the State of Texas Category 5."

.2 The contractor shall layout his work from established baseline and TBM indicated on the drawings and shall be responsible for all measurements in connection with the layout. The Contractor shall furnish, at his own expense, all stakes, templates, platforms, equipment, tools, materials, and labor required to layout any part of the work. The Contractor shall be responsible for maintaining and preserving baseline and TBM indicated on the drawings for duration of construction. If such marks are destroyed, the Contractor shall replace them at his own expense. At the end of Construction of the project, the Contractor shall provide the City a grade certificate prepared by a Registered Professional Land Surveyor. This certificate should state that the infrastructure is constructed in accordance to the construction documents or as approved by the owner and Engineer of Record, which are noted on the record plan set.

**5.6. Authority and Duties of Inspectors.** Inspectors will be authorized to inspect all work done and all materials furnished. Such inspection may extend to all or to any part of the work and to the preparation or manufacture of the materials to be used. An Inspector will be assigned to the work by the Engineer and will report to the Engineer as to the progress of the work and the manner in which the work is being performed. The Inspector will also report to the Engineer whenever it appears that the materials furnished and the work performed by the Contractor fail to fulfill the requirements of the specifications and contract and call the attention of the Contractor to any such failure or other infringement. Such inspection will not relieve the Contractor from any obligation to perform the work in accordance with the requirements of the specifications. In case of any dispute arising between the Contractor and the Inspector as to materials furnished or the manner of performing the work, the Inspector will have the authority to reject materials or suspend work on the operation or materials in dispute until the question at issue can be referred to and decided by the Engineer. The Inspector will not be authorized to revoke, alter, enlarge or release any requirement of these specifications, nor to approve or accept any portion of work, nor to issue instructions contrary to the plans and specifications. The Inspector will in no case act as foreman or perform other duties for the Contractor nor interfere with the management of the work.

**5.7. Inspection.** The Contractor shall provide sufficient, safe and proper facilities at all reasonable times for the observation/inspection of the Work by the duly authorized representative of the Owner. The Consultant and the Owner may make visits to the site at intervals appropriate to the various stages of construction to observe the progress of the executed Work and to determine, in general, if the Work is proceeding in general accordance with the Contract Documents.

.1 Consultant will not be required to make exhaustive or continuous on-site inspections to check the quality or quantity of the Work. Consultant's efforts will be directed toward providing for Owner a greater degree of confidence that the completed Work will generally conform to the Contract Documents. On the basis of such visits and on-site observations as an experienced and qualified design professional, Consultant will keep Owner informed of the progress of the Work and will endeavor to guard Owner against obvious defects and deficiencies in the Work which is the responsibility of the Contractor to prevent and/or cure.

.2 No Approval of any phase of the construction Project by any of the City's representatives or observer/inspectors shall relieve the Contractor from full compliance with the Contract Documents regarding the ultimate Work product. Any additional cost, damages, or delays occasioned by patent or latent defects in the Work, and/or failure to meet the requirements of the Contract Documents, at any Project phase, shall be borne by the Contractor.

**5.8. Final Acceptance.** Final Inspection and acceptance of the Project will be considered only after all stipulations, requirements and provisions of this Contract are faithfully completed and the Project is delivered to the City by Contractor in an acceptable condition for the intended use by Owner. In the event that all major Contract pay items are complete and only minor clean-up operations remain for Contract completion, the Director of Public Works has the discretionary authority to issue a Letter of Conditional Approval. Should the Director's Letter of Conditional Approval contain conditions for the final Acceptance of the Work, Contract Time will continue to be charged against the Contractor until such conditions have been corrected to the satisfaction of the Director of Public Works.

**5.9. Federal Inspection.** When the United States Government is to pay a portion of the cost of the work covered by the contract, the work will be subject to inspection by United States Government representatives. Such inspection will in no sense make the United States Government a party to the contract.

**5.10. Removal of Defective and Unauthorized Work.** All work, which has been rejected as being in nonconformance with the plans and specifications, shall be remedied or removed and replaced in an acceptable manner by the Contractor at his expense. Work done beyond the lines and grades given or as shown on the plans, except as herein provided, or any extra work done without written authority will be considered as unauthorized and done at the expense of the Contractor and will not be paid for. Work so done may be ordered removed at the Contractor's expense. Upon failure on the part of the Contractor to comply with any order of the Engineer made under the provisions of this Article, the Engineer will have authority to cause defective work to be remedied or removed and replaced and unauthorized work to be removed and the cost thereof may be deducted from any moneys



due or to become due to the Contractor.

**5.11. Record Drawings.** Before final payment to the Contractor, the Contractor who has control of the Work and is in a position to know how the Project was constructed, shall submit to the Consultant a set of clearly marked Plans and related documents suitable for Consultant's use in preparing Owner's final "Record Drawings" on reproducible mylar for the City's permanent file.

**5.12. Partial Acceptance.** Partial acceptance by Owner for beneficial occupancy of any completed part of the Work, which has specifically been identified in the Contract Documents as being eligible for early Owner Acceptance, or which Owner, Consultant and Contractor agree constitutes a separately functioning and usable part of the Work that can be used by Owner without significant interference with Contractor's performance of the remainder of the Work, may be accomplished prior to Final Acceptance of the total Work subject to the following:

.1 Owner may at any time request to the Contractor in writing to permit Owner to beneficially occupy any such part of the Work, which Owner believes to be, ready for its intended use, substantially complete and ready for Final Acceptance. If Contractor agrees, Contractor will certify to Owner and Consultant that said part of the Work is substantially complete and request City to issue a Letter of Conditional Approval or Final Acceptance for that part of the Work. Within a reasonable time after either such request, Owner, Contractor and Consultant shall make an inspection of that part of the completed and Finally Accepted Work to determine its status of completion.

.2 Owner may at any time request Contractor in writing to permit Owner to take over operation of any such Owner part of the Work although it is not Substantially Complete. A copy of such request will be sent to the Consultant and within a reasonable time thereafter, Owner, Contractor and Consultant shall make an inspection of that part of the Work affected by the request to determine its status of completion and will jointly prepare a list of the items remaining to be completed or corrected before Final Acceptance. If Contractor does not object in writing to Owner and Consultant that such part of the Work is not ready for separate operation by Owner, or that separate operation by Owner will significantly interfere with Contractor's remaining operations, Owner will finalize the list of items to be completed or corrected and will deliver such list to Contractor together with a written recommendation as to the division of responsibilities pending Final Acceptance with respect to security, operation, safety, maintenance, utilities, insurance, and retainage for that part of the Work taken over for operation by Owner. During such operation, Owner shall allow Contractor reasonable access to complete or correct items on said list and to complete other related Work.

## ITEM 6

### CONTROL OF MATERIALS

**6.1. Sources of Supply and Quality of Materials.** The source of supply of each of the materials shall be approved by the Engineer before delivery is started and at the option of the Engineer, may be sampled and tested for determining compliance with the governing specifications by the Engineer before delivery is started. If it is found after trial that sources of supply previously approved do not produce uniform and satisfactory products, or if the product from any source proves unacceptable at any time, the Contractor shall furnish materials from other approved sources. Only materials conforming to the requirements of these specifications and approved by the Engineer shall be used in the work. All materials being used are subject to inspection or test at any time during preparation or use. Any material which has been tested and accepted at the source of supply may be subjected to a check test after delivery and all materials which, when retested, do not meet the requirements of the specifications, will be rejected. No material, which after approval, has in any way become unfit for use shall be used in the work. If, for any reason, the Contractor selects a material which is approved for use by the Engineer by sampling and testing or other means, and then decides to change to a different material requiring additional sampling and testing for approval, the expense for such sampling and testing may be deducted from any moneys due or to become due to the Contractor.

**.1 Warranties or Guarantees.** If the normal trade practice for manufacturers is to furnish warranties or guarantees for the materials and equipment specified herein, the Contractor shall turn the guarantees and warranties over to the Engineer for potential dealing with the manufacturers. The extent of such warranties or guarantees will not be a factor in selecting the successful Bidder.

**.2 Buy America.** All manufacturing processes for steel or iron materials or for applying a coating to steel or iron materials (coating includes epoxy coating, galvanizing, painting and any other coating that protects or enhances the value of the steel or iron material) incorporated into the finished project must occur in the United States except (a) The requirements do not prevent a minimal use of foreign materials, if the cost of such materials used does not exceed one-tenth of one (0.1) percent of the total contract cost or \$2,500, whichever is greater; and, (b) When shown on the plans, steel or iron products or application of a coating to steel or iron materials (coating includes epoxy coating, galvanizing, painting and any other coating that protects or enhances the value of the steel or iron material) will have alternate bid items for foreign materials.

- a. All manufacturing process are defined as all process required to change the raw ore or scrap metal into the finished, in-place steel product. The Contractor shall furnish, to the Engineer, certified mill test reports on the base metal and producer's certifications on all subsequent manufacturing processes stating compliance with the applicable specification(s) and that all manufacturing processes occurred in the United States. Producer's certifications shall bear the notarized signature of a responsible authorized representative of the producer

**.3 Nonhazardous Recyclable Materials (NRMs).** Hazardous recycled materials will not be allowed as replacement materials in TxDOT specification items. Use of Nonhazardous Recyclable Materials (NRMs) is allowed and sources of such materials will be considered by the Engineer in the same manner as other sources submitted for approval by the Contractor unless the specification for that item of work includes specific instructions regarding use of such NRMs. If the material contains constituents not normally found in the virgin material it is replacing, the Contractor must establish to the satisfaction of the Engineer that these constituents will not adversely affect the performance of the item of construction, threaten the waters of the state, cause a nuisance, or endanger human health and/or welfare.

- a. The Contractor shall also determine if NRMs being used are regulated under 30 Texas Administrative Code (TAC) Chapters 312, 330, 332, 334, or 335 and shall be responsible for complying with all general prohibitions, notification requirements, and shipping and reporting requirements stipulated therein.
- b. The Contractor shall furnish to the Engineer a written certification sealed by a Texas Licensed Professional Engineer that the NRMs are used in accordance with TxDOT requirements as stipulated in the DMS 11000, "Guidelines for Evaluating and Using Nonhazardous Recyclable

Materials (NRMs)." Certain NRMs routinely in use in TxDOT construction and maintenance projects including crushed concrete, reclaimed asphalt pavement (RAP), fly and bottom ashes from electrical utility plants, ground granulated blast furnace slag, cement, tire rubber, plastics, ceramics, and glass are exempt from TxDOT's certification requirements, as long as the NRMs have not come in contact with hazardous materials. Materials that are TxDOT property are also exempt from the certification requirements.

- c. The City reserves the right to review the analytical data for any NRM and to perform verification tests, as desired.

**6.2. Material.** Unless otherwise specified, all materials incorporated in the permanent Work shall be new, and both workmanship and materials shall be of good quality in accordance with Specifications. The Contractor shall, if required, furnish satisfactory evidence as to the supply or manufacture, and quality of materials supplied.

**6.3. Disposal, Recycling, and Reuse of Construction Materials and Waste.** The Contractor shall be responsible for quantifying volumes and identifying reuse, recycling, or disposal locations of all materials removed from the construction site, including soil, rock, gravel, excavation spoils, construction debris, and contaminated materials through the use of trip tickets, manifests, or other methods, as appropriate for the type of material. Where the material has been identified in the Plans and Specifications or is suspected to be contaminated by hazardous waste, toxic waste, petroleum storage tank waste, or other regulated material, the contractor shall appropriately characterize the material for disposal, reuse, or recycling at a Texas Commission on Environmental Quality (TCEQ) and City-approved facility prior to removal from the project site. The City reserves the right to devise and require use of certification forms in this regard. The City encourages reuse and recycling of materials, where applicable. The Contractor shall also be responsible for the safe and proper reuse and recycling of materials in accordance with all federal state, and local regulations, when reuse or recycling is appropriate. The City retains the right to require the Contractor to provide evidence to the City's satisfaction that all waste materials have been disposed of at an approved landfill, or as legally appropriate. No waste material shall be deposited in any natural drain, creek, river or other water course. Reclamation of low areas may be performed only with the approval of the Director of Public Works. The Contractor shall, as directed by the Inspector, remove at the Contractor's own expense any fill that is blocking drainage which fill blockage has resulted from the Contractor's operations.

**6.4. Sampling, Testing and Inspection.** All materials, before being incorporated in the work, shall be inspected, tested and approved by the Engineer, and any work in which materials are used without prior test and approval or written permission of the Engineer may be ordered removed and replaced at the Contractor's expense. Sampling and testing of all materials proposed to be used will be made by the Engineer. The selection of the method of test will be designated by the City. Where tests are required, other than those made in the laboratory, for the purpose of control in the manufacture of a construction item, the Contractor shall be required to furnish such facilities and equipment as may be necessary to perform the tests and inspection and shall be responsible for calibration of all test equipment required. When requested, the Contractor shall furnish a complete written statement of the origin, composition and/or manufacture of any or all materials that are to be used in the work. If the Contractor chooses to use materials or products requiring inspection and approval at the point of manufacture or source and such inspection will require abnormal expense, i.e., out of the contiguous forty-eight United States, the additional expense of such inspection over the normal cost of such services will be borne by the Contractor and will be deducted from any moneys due or to become due to the Contractor.

**.1 Special Testing.** The Owner or the Consultant may require special inspection, testing or approval of material or Work for determining compliance with the requirements of the Contract Documents. Upon Owner-authorized direction of the Consultant, the Contractor shall promptly arrange for such special testing, inspection or approval procedure. Should the material or Work fail to comply with the requirements of the Contract Documents, the Contractor shall bear all costs of the special testing, inspection or approval as well as the cost of replacement of any unsatisfactory material or Work, otherwise, should the Work prove not defective, the Owner shall bear such costs and an appropriate Field Alteration shall be issued. The costs of routine testing shall be borne by the Owner.

**.2 Pretested Materials.** Subject to conditions established in a written agreement between a supplier and Engineer, pretested and approved materials may be incorporated into the work.

**6.5. Plant Inspection and Testing.** If the volume of the work, construction progress and other considerations warrant, the Engineer may undertake the inspection of materials at the source. It is understood, however, that no obligation is assumed to inspect materials in that manner.

.1 Plant inspection will be undertaken only upon the following conditions:

- a. The cooperation and assistance of the Contractor and the producer with whom he has contracted for materials is assured;
- b. The representative of the Engineer shall have full entry at all times to such parts of the plant as may concern the manufacture or production of the materials ordered;
- c. When required by the Engineer, the material producer shall furnish an approved weatherproof building for the use of the Inspector. The building shall be constructed or furnished near the plant, at a location acceptable to the Engineer and may be either an independent structure or, if a portion of the structure is used by the material producer, the City office or laboratory area shall not interconnect with material producer utilized rooms. Access to the office or laboratory shall be by direct outside entrance, controlled by the Engineer. The building shall be adequately lighted, heated, air conditioned and ventilated. Adequate rest room facilities shall be provided;
- d. The Contractor shall be responsible for furnishing and calibrating scales, measures and/or other equipment as may be required by the Engineer for the inspection of materials;
- e. Materials produced under City inspection shall be for City use only unless released in writing by the Engineer; and,
- f. In those cases where inspection of any item is requested for periods other than daylight hours, the inspection shall be provided under the following conditions: (a) Continuous production of materials for City use is necessary due to the production volume being handled by the plant; and (b) The lighting provided by the plant is approved by the Engineer to be adequate to allow satisfactory inspection of the material being produced.

**6.6. Shop Drawings and Samples.**

.1 Contractor shall reasonably check and verify all field measurements and after complying with applicable procedures specified in the Contract Documents, Contractor shall submit (in accordance with the Contractor's schedule of Shop Drawing submissions submitted to the Owner and Consultant for information purposes), to Consultant for review and approval or for other appropriate action, five (5) copies, of all Shop Drawings bearing a stamp or specific written indication that Contractor has satisfied the Contractor's responsibilities under the Contract Documents with respect to his review of his submission. All Contractor submissions will be clearly identified as required by the Consultant. The Contractor data shown on the Shop Drawings will be complete with respect to quantities, dimensions, specified performance and design criteria, materials and similar data to enable Consultant to review the information.

.2 Contractor shall also promptly submit to Consultant for review and approval any Samples required by the Contract Documents. All Samples will be accompanied by a specific written indication that Contractor has satisfied Contractor's responsibilities under the Contract Documents with respect to the review of the submission, identity of materials, suppliers, and other pertinent data such as catalog numbers, and use for which intended.

.3 Before Contractor's submission of each Shop Drawing or sample, Contractor shall have determined and verified all quantities, dimensions, specified performance criteria, installation requirements, materials, catalog numbers and similar data with respect thereto and reviewed or coordinated each Shop Drawing or Sample with other Shop Drawings and Samples and with the requirements of the Work and the Contract Documents.

- a. At the time of each Contractor submission, Contractor shall give Consultant specific written notice of each variation that the Shop Drawings or samples may have from the requirements of the Contract Documents, and, in addition, shall cause a specific Contractor notation to be made

on each Shop Drawing submitted to Consultant for review, approval, or other appropriate action highlighting each such variation.

- b. Shop drawings for alternate designs not shown in the plans shall be reviewed and approved by the Engineer and shall not be implemented without an approved Field Alteration.
- c. Consultant will review, approve, or take other appropriate action with the Shop Drawings and samples with reasonable promptness so as to cause no delay in the Work. Consultant's review, approval, or other appropriate action regarding Contractor's submissions will be only to check conformity with the design concept of the Project and for compliance with the information contained in the Contract Documents and shall not extend to means, methods, techniques, sequences or procedures of construction (except where a specific means, method, technique, sequence or procedure of construction is indicated in or required by the Contract Documents) or to safety precautions or programs incident thereto. The review and approval of a separate component item will not indicate approval of the assembly into which the item is functionally integrated. Contractor shall make corrections required by Consultant, and shall return the required number of corrected copies of Shop Drawings to the Contractor. Contractor may be required to resubmit as required revised Shop Drawings or Samples for further review and approval. Contractor shall direct specific attention in writing to any new revisions not specified by Contractor on previous Contractor submissions.

.4 Consultant's review, approval, or other appropriate action regarding Shop Drawings or Samples shall not relieve Contractor from responsibility for any variation from the requirements of the Contract Documents unless Contractor has in writing called Consultant's attention to each such variation at the time of submission as required by Article 6.6.2.b and Consultant has given written approval of each such variation by a specific written notation thereof incorporated in or accompanying the Shop Drawing or sample approval; nor will any approval by Consultant relieve Contractor from responsibility for Contractor errors or omissions in the Shop Drawing submissions or from Contractor's responsibility to comply with the provisions of Article 6.6.2.c.

.5 Where Consultant requires by written request an approved Contractor Shop Drawing or Sample, any related Work performed by Contractor prior to Consultant's review and approval of the affected submission will be at the risk of Contractor.

**6.7. Storage of Materials.** Materials shall be so stored as to insure the preservation of quality and fitness for the work. When considered necessary by the Engineer, the materials shall be placed on wooden platforms or other hard, clean surfaces and not on the ground. The materials shall be placed under cover when so directed. Stored materials shall be so located as to facilitate prompt inspection. When approved by the Engineer, selected materials or products may be pretested and approved for use, provided they are stored in an area meeting the requirements set forth by the Engineer.

**6.8. Imported Fill Material.** The Contractor shall provide to the City the name and location of the borrow source for all fill materials imported to the construction site, including, but not limited to, rock, gravel, sand, soils, select fill, topsoil, etc. The City reserves the right to reject any proposed imported fill materials considered not acceptable by the City due to the physical or environmental nature of the material. The Contractor shall provide documentable evidence, to the City's satisfaction, as to the source, quantity, and quality of the fill material in the form of trip tickets, manifests, receipts, analytical results, etc., as required by the City. The City reserves the right to secure such information on a form devised by the City and require the Contractor's certification in this regard.

**6.9. Defective Materials.** All materials not conforming to the requirements of these specifications will be rejected and shall be removed immediately from the site of the work unless permitted to remain by the Engineer. Rejected materials, the defects of which have been subsequently corrected, shall have the status of new material. Upon refusal on the part of the Contractor to comply with any order of the Engineer made under the provisions of this Item, the Engineer will have authority to remove and replace defective material and to deduct the cost of removal and replacement from any moneys due or to become due to the Contractor.

**6.10. Hazardous Materials.** Materials imported to the project shall be free of any hazardous material as defined in Item 1, "Definition of Terms."

**.1 Materials Existing On Work Site.** When the Contractor encounters existing materials on sites owned or controlled by the City or in required material sources that are suspected by visual observation or smell to contain hazardous materials, the Contractor shall immediately notify the Engineer.

**.2 Materials Delivered To Work Site.** When materials delivered to the project are suspected by visual observation or smell to contain hazardous materials as defined in Item 1, they shall be sampled and analyzed to the Engineer's satisfaction to confirm the materials suitability for use. When materials delivered to the project are found to be unsuitable for use, the material shall be removed and disposed of by the Contractor. The testing for and removal or disposition of such hazardous materials delivered to the project by the Contractor shall be at the Contractor's expense. No suspending of the "Time Charges" and no extensions of working time will be granted to the Contractor resulting from hazardous material, which he has delivered.

**.3 Indemnify.** The Contractor shall indemnify and save harmless the City and its representatives, for the generation and/or disposition of hazardous materials generated by the Contractor on all work done by the Contractor on City owned or controlled sites. Further, the Contractor shall indemnify and save harmless the City and its representatives from any liability or responsibility arising out of the generation or disposition of any hazardous materials obtained, processed, stored, shipped, etc., on sites not owned or controlled by the City. Should the City be required to make any payments or pay any costs or fees or make restitution as a result of the Contractor's actions, the Contractor shall reimburse the City for any and all payments of moneys.

**.4 Regulations.** The rules, regulations, policies, procedures, standards, applications and reports of the various State agencies including but not limited to the Texas Commission on Environmental Quality (TCEQ), the Railroad Commission (RRC), and of the applicable federal departments and agencies including but not limited to the Environmental Protection Agency (EPA), Department of Energy (DOE), DOT and OSHA shall apply to all operations of the Contractor, including but not limited to the following: sampling, characterization of waste, transportation of waste, recycling and disposal.

**6.11. Construction Loads on Structures.** Construction loads on structures, which will remain in service by the traveling public during or after completion of the project, for the purpose of performing construction operations, such as cranes erecting beams in adjacent spans, may be allowed if necessary. Prior to any operation which may require placement of such equipment of a bridge, the Contractor shall prepare and submit for approval detailed erection analyses, prepared by a Registered Professional Engineer.

**.1** The erection analyses shall include all axle loads, tire loads, outrigger placements, center of gravity, equipment weight, and predicted loads on such tires and/or outrigger for all planned movements, swings, or boom reaches. The City will make available to the Contractor any available plans and material reports for the existing structure. The analyses shall demonstrate that no overstresses will occur in excess of those normally allowed for occasional overweight loads.

**6.12. Hauling of Divisible Materials Paid for by Weight or Truck Measure.** Any vehicle, truck, truck-tractor, trailer or semi-trailer or combination of such vehicles, when used to deliver materials to a project, shall comply with the State laws concerning the legal gross and axle weights. If the vehicle or combination has a valid yearly overweight tolerance permit which allows small percentages over legal gross and axle weights, such tolerance is also applicable to delivery of materials to a project. However, such tolerance is not applicable to the Interstate System of Highways.

**.1** The Contractor shall provide to the Engineer, upon demand, all copies of the yearly overweight tolerance permits for any vehicle to be used to deliver materials to a project.

**.2** The Contractor shall request, in writing to the Engineer, permission to haul overweight divisible loads within the limits of a project for hauling routes on which the traveling public is excluded. If, after evaluation by the City, no damage or overstresses in excess of those normally allowed for overweight loads will result to roadbeds or structures which will continue in use after project completion, permission

will be granted.

.3 When hauling overweight divisible loads within the limits of a project which exceed the legal loads allowed by State law, including yearly overweight tolerance permit, the loads must be hauled such that only a single vehicle is on any span or continuous unit at one time. Barricades, fences, or other positive method shall be used to prevent other vehicles from access to any bridge at the time the overweight divisible load is on any span or continuous unit, which is being used as part of a haul route.

.4 When divisible loads are hauled such that the haul route is accessible to the traveling public, and haul tickets are issued and used for payment purposes, the net weight of the load for acceptance purposes under this Item shall be as follows:

- a. If the gross vehicle weight is less than the maximum allowed by State law, including any applicable yearly overweight tolerance permit, the net weight of the load shall be determined by deducting the tare weight of the vehicle from the gross weight.
- b. If the gross vehicle weight is more than the maximum allowed by State law, including any applicable yearly overweight tolerance permit, the net weight of the load shall be determined by deducting the tare weight of the vehicle from the maximum gross weight allowed.

.5 When divisible loads are hauled such that the haul route is not accessible to the traveling public, advance permission is obtained in writing from the Engineer, and haul tickets are issued and used for payment purposes, then the net weight of the load for acceptance purposes under this Item shall be as follows:

- a. If the gross vehicle weight is less than the maximum overweight allowed by advance written permission from the Engineer, the net weight of the load shall be determined by deducting the tare weight of the vehicle from the gross weight.
- b. If the gross vehicle weight is more than the maximum overweight allowed by advance written permission from the Engineer, the net weight of the load shall be determined by deducting the tare weight of the vehicle from the maximum overweight allowed.

.6 Continued overloading in excess of the maximums described in Article 6.12.4.b and Article 6.12.5.b will be grounds for rejection of such load and/or suspending hauling operations until the Engineer is satisfied that only loads not exceeding the maximums are hauled.

.7 Any bridges which are load posted, which will remain in service by the traveling public during or after the completion of the project, that are proposed to be used as a portion of a haul route, will be evaluated by the City for structural capability to handle the proposed hauling loads. These bridges will be subject to the same maximum stress limitations, as would any non-load posted bridge.

.8 The Contractor shall furnish a certified tabulation of measurements, tare weights and allowable legal gross weight calculations for all trucks, etc., prior to their use on the project. Each truck shall be identified by a permanent and plainly legible number located on the truck and on the bed of the truck and/or trailer. When the specifications establish measurement of and payment for materials by truck measurement, the Engineer may require the weighing of the various types of loaded vehicles used by the Contractor to transport the material. This weight will be used to determine the maximum volume of the material being hauled that each type of vehicle may transport. The cost of such weighing shall be considered subsidiary to the pertinent bid item.

.9 The above requirements are applicable to vehicles hauling materials over existing roadbeds and structures within the project limits where the roadbeds or structures will continue in use after project completion, except as controlled by specifications and special provisions in the contract. The requirements do not apply to the transportation of materials from a borrow or base source, concrete plant, asphalt plant, etc., where the haul route does not require travel over public roads outside the project limits or existing roadbeds or structures within the project limits that will continue in use after project

completion.

**6.13. Construction Traffic on Structures.** Construction traffic on existing bridges and culverts outside the limits of a project shall be subject to the same maximum size and weight limitations as any other vehicle, which has no connection to the project. Overweight permit requests shall be handled through normal methods for all non-divisible loads delivering materials to the project.

.1 Construction traffic on bridges and culverts within the limits of a project, including any structures under construction, which will remain in service by the traveling public during or after the completion of the project, shall be subject to the same size and weight limitations as structures outside the limits of the project.

.2 Construction equipment and vehicles which exceed size and weight limitations, including applicable yearly overweight tolerance permits, may be authorized to cross structures provided the Contractor requests, in writing to the Engineer, permission to move such construction equipment across structures within the project limits. If, after evaluation by the City, no damage or overstresses in excess of those normally allowed for overweight loads will result to roadbeds or structures which will continue in use after project completion, permission may be granted. These same provisions shall apply to any load posted highway or bridge.

.3 Where a detour is not readily available or economically feasible to use, an occasional crossing of a structure outside the project limits with overweight equipment may be allowed for relocating equipment only, but not for hauling divisible material, provided a structural analysis of the structure using the exact equipment in question indicates that no damage or overstresses in excess of those normally allowed for overweight loads will result to roadbeds or structures which will continue in use after project completion. This structural analysis will be performed by the City, or at the option of the Contractor, a structural analysis shall be prepared by a Registered Professional Engineer, using the exact equipment in question. When the City performs the structural analysis, the Contractor shall notify the City, in writing, sufficiently in advance of the anticipated crossing and the Contractor shall furnish the manufacturer's certificate of equipment weight, including the weight distribution on the various axles and including any additional parts such as counterweights. Temporary matting and/or other requirements may be imposed by the Engineer when an occasional crossing is allowed.

.4 The Contractor shall be responsible for protection of existing bridges and other structures, which will remain in use by the traveling public during and after the completion of the project. Any such structure damaged by the use of construction equipment shall be restored to its original condition or replaced by the Contractor. Additional temporary fill may be required by the Engineer for protection of certain structures.



## ITEM 7

### LEGAL RELATIONS AND RESPONSIBILITIES TO THE PUBLIC

**7.1. Laws to be Observed.** The Contractor in the performance of the Work shall comply with all pertinent Ordinances of the City of San Antonio, Laws of the State of Texas and of the United States, including Rules and Regulations of the United States Department of Labor, pertaining to Occupational Safety and Health Administration standards as presently existing or as may hereinafter be modified or amended.

.1 Where construction projects cross or run along state highways, the Contractor shall comply with governing TxDOT Regulations as outlined in State Permits for each crossing. In cases where State Regulations do not apply, City Regulations shall be binding.

**7.2. Permits, Licenses, and Taxes.** The Contractor shall procure all permits and licenses; pay all charges, fees, and taxes; and give all notices necessary and incidental to the due and lawful prosecution of work, except for permits provided by the City and specified by Articles 7.3 and 7.19.

.1 **State Sales Tax.** The Owner qualifies for exemption from state and local sales tax and will furnish the Contractor with a tax exemption certificate. It is the Contractor's responsibility to claim exemption from payment of applicable state and local sales taxes by complying with such procedures as may be prescribed by the State Comptroller of Public Accounts. The Contract separates the cost of materials and tangible equipment from skill, labor and other associated costs of construction. This is in accordance with the Texas Tax Code to allow tax exemption on the Contract Price for materials. Certain construction equipment that is owned or rented by the CONTRACTOR may be subject to State and Local Sales Tax.

**7.3. Royalties and Patents.** The Contractor shall pay all royalties and license fees, and defend all suits or claim for infringement of any patent rights and shall save the City harmless from loss on account thereof, except that the City shall be responsible for all such royalties and license fees and loss when a particular design or process, or the product of a particular manufacturer or manufacturers is specified; provided, however, if the Contractor has reason to believe the design, process or product specified constitutes an infringement of a patent, he shall be responsible for such royalties, license fees and loss unless he promptly gives such information to the Owner.

**7.4. Prevailing Wage Rate.** This Contract, in full compliance with the Texas Government Code, Chapter 2258, requiring that not less than the general prevailing wage rate (basic hourly and fringe, if applicable) for Work of a similar character, as has been established by the Davis-Bacon wage rate and City Council, a copy of which wage rates and administrative policies is incorporated into the Supplemental General Conditions, shall be required.

.1 **Penalty.** In further compliance with the Texas Government Code, Chapter 2258, the Contractor shall forfeit as a penalty to the City the sum of Sixty Dollars (\$60.00) for each laborer, workman, or mechanic employed, for each day, or portion thereof, such laborer, workman or mechanic is paid less than the said stipulated rates for any Work done under the Contract, whether by the Contractor himself, or any first tier Subcontractor or subtier Subcontractor working under the Contractor.

#### **7.5. Insurance:**

.1 Prior to commencement of any work under this CONTRACT, CONTRACTOR shall furnish an original completed Certificate(s) of Insurance to the CITY's Public Works Department and City Clerk's Office, which shall be completed by an agent authorized to bind the named underwriter(s) and their company to the coverage, limits, and termination provisions shown thereon, and which shall furnish and contain all required information referenced or indicated thereon. The original certificate(s) must have the agent's original signature, including the signer's company affiliation, title and phone number, and be mailed directly from the agent to the City. The CITY shall have no duty to pay or perform under his CONTRACT until such certificate shall have been delivered to the CITY's Public Works Department and the City Clerk's Office, and no officer or employee, other than the CITY's Risk Manager, shall have

authority to waive this requirement.

.2 The CITY reserves the right to review the insurance requirements of this section during the effective period of this CONTRACT and any extension or renewal hereof and to modify insurance coverage and their limits when deemed necessary and prudent by the CITY'S Risk Manager based upon changes in statutory law, court decisions, or circumstances surrounding this Contract, but in no instance will the CITY allow modification whereupon the CITY may incur increased risk.

.3 A CONTRACTOR's financial integrity is of interest to the CITY, therefore, subject to CONTRACTOR's right to maintain reasonable deductibles in such amounts as are approved by the CITY, CONTRACTOR shall obtain and maintain in full force and effect for the duration of this CONTRACT, and any extension hereof, at CONTRACTOR's sole expense, insurance coverage written on an occurrence basis, by companies authorized and admitted to do business in the State of Texas and rated A- or better by A. M. Best Company and/or otherwise acceptable to the CITY, in the following Types and amounts:

TYPE	AMOUNT
a. Worker's Compensation and Employer's Liability	Statutory \$500,000/\$500,000/\$500,000
b. Commercial General (Public) Liability Insurance include coverage for the following:  1. Premises/Operation 2. Independent Contractors * 3. Products/Completed Operations 4. Personal Injury 5. Contractual Liability 6. Explosion, Collapse and underground Property Damage * 7. Broad Form Property Damage, to include Fire Legal Liability *	Combined Single Limit for Bodily Injury and Property Damage of <u>\$1,000,000</u> per occurrence or its equivalent with a \$2,000,000 Aggregate
c. Business Automobile Liability  1. Owned/Leased Automobiles 2. Non-owned Automobiles 3. Hired Automobiles	Combined Single Limit for Bodily Injury and Property Damage: \$1,000,000 per occurrence or its Equivalent
d. Motor truck carriers pollution liability including cleanup costs	\$5,000,000
e. Contractor's Pollution Liability - Including Clean Up	\$1,000,000
f. Payment/Performance bond	\$(Amount of Contract)

.4 The Contractor shall be liable for the first tier Subcontractors' insurance coverage appropriate to their scope of Work given the above guidelines, and in the event a first tier Subcontractor is unable to furnish insurance in the limits required by the Contractor, the Contractor shall endorse the first tier Subcontractor as an Additional Insured on the applicable Contractor policies. Contractor shall be responsible for obtaining Certificates of Insurance from the first tier Subcontractor, and upon request furnish copies to the Owner.

.5 The CITY shall be entitled, upon request and without expense, to receive copies of the policies and all endorsements thereto as they apply to the limits required by the CITY, and may make a reasonable request for deletion, revision, or modification of particular policy terms, conditions, limitations or exclusion (except where policy provisions are established by law or regulation binding upon either of the parties hereto or the underwriter of any such policies). Upon such request by the CITY, the CONTRACTOR shall exercise reasonable efforts to accomplish such changes in policy coverage, and shall pay the cost thereof.

.6 CONTRACTOR agrees that with respect to the above required insurance; all insurance contracts and Certificate(s) of Insurance will contain the following required provisions.

- \* Name the CITY and its officers, employees, volunteers and elected representatives and additional insureds as respects operations and activities of, or on behalf of, the named insured performed under contract with the CITY, with the exception of the workers' compensation and professional liability policies;
- \* The CONTRACTOR's insurance shall be deemed primary with respect to any insurance or self insurance carried by the City of San Antonio for liability arising out of operations under the contract with the City of San Antonio; and
- \* Workers' compensation and employers' liability policy will provide a waiver of subrogation in favor of the CITY.

.7 CONTRACTOR shall notify the CITY in the event of any notice of cancellation, nonrenewal or material change in coverage and shall give such notices not less than thirty (30) calendar days prior to the change, or ten (10) calendar days notice for cancellation due to non-payment of premiums, which notice must be accompanied by a replacement Certificate of Insurance. All notices shall be given to the CITY at the following address:

CITY OF SAN ANTONIO  
Public Works Department  
P. O. Box 839966  
San Antonio, Texas 78283-3966

CITY OF SAN ANTONIO  
City Clerk's Office  
P. O. Box 839966  
San Antonio, Texas 78283-3966

.8 If CONTRACTOR fails to maintain the aforementioned insurance, or fails to secure and maintain the aforementioned endorsements, the CITY may obtain such insurance, and deduct and retain the amount of the premiums for such insurance from any sums due under the agreement; however, procuring of said insurance by the CITY is an alternative to other remedies the CITY may have, and is not the exclusive remedy for failure of CONTRACTOR to maintain said insurance or secure such endorsement. In addition to any other remedies the CITY may have upon CONTRACTOR's failure to provide and maintain any insurance or policy endorsements to the extent and within the time herein required, the CITY shall have the right to order CONTRACTOR to stop work hereunder, and/or withhold any payment(s) which become due, to CONTRACTOR hereunder until CONTRACTOR demonstrates compliance with the requirements hereof.

Nothing herein contained shall be construed as limiting in any way the extent to which CONTRACTOR may be held responsible for payments of damages to persons or property resulting from CONTRACTOR's or its subcontractors' performance of the work covered under this agreement.

.9 The Contractor shall be required to provide workers compensation coverage through a group plan or other method satisfactory to the city for each employee of the Contractor employed on the Project. The Contractor shall provide all required certificates of coverage for all persons providing services on the project, in accordance with the Texas Workers Compensation Commission, Rule 110.110 (e) (1). The Contractor will be required to:

- a. Provide coverage and certificates of coverage for all his employees.
- b. Obtain and provide the City all required Certificates of Coverage for all persons providing services on the Project.
- c. Notify the City in writing, by certified mail or personal delivery, within ten (10) calendar days after changes that materially affects any provisions of the coverage.
- d. Post notices on each project site, and contractually require all subcontractors to do the same.

**7.6. Restoration of Surfaces Opened by Permit.** The Contractor shall not allow any party to make an opening in the highway unless a duly authorized permit signed by the Public Works' Right-of-Way Division is presented. Until the acceptance of the work, the Contractor shall make all necessary repairs in the roadway where openings have been made by due authority. Such repair work will be performed in accordance with Article 4.5.

#### **7.7. Public Safety and Convenience**

**.1 Contractor's Safety Program.** The Contractor shall be responsible for implementing, maintaining and supervising safety precautions and programs in connection with the Work. The Contractor will provide the City with the name of the person who is responsible for the Contractor's Safety Program. In addition, the Contractor will provide for the City's reference a copy of the Contractor's safety program. The Contractor shall take reasonable precautions for the safety of, and shall provide protection to prevent damage, injury or loss to:

- a. All employees on the Work, and all other persons who may reasonably be foreseen to be affected by the Work.
- b. All the Work and all materials to be incorporated at street crossings, along proposed detour routes, and at material stockpiles. Where directed by the City Engineer or his representative, the Contractor shall provide and maintain suitable warning signs, barricades and lights, in accordance with the details shown on the Plans, to direct traffic around the Work in progress and to assure the safety of the public. The Contractor shall provide adequate warning signs, barricades, lights and, where necessary, flagmen for the Project or portions of the Project within which operations are being prosecuted in any one day or which will be closed over night.
- c. Other property at the site or adjacent thereto including but not limited to, trees, shrubs, lawns, walks, pavements, roadways, structures and utilities not designated for removal, relocation or replacement in the course of construction.

**.2 Safety Regulations.** The Contractor shall comply with the U.S. Department of Labor Safety and Health Regulations for construction promulgated under the Occupational Safety and Health Act of 1970 (Public Law 91-596 and all subsequent amendments) and under Section 107 of the Contract Work Hours and Safety Standards Act (Public Law 91-54 and all subsequent amendments). This project is subject to all of the Safety and Health Regulations (CFR 29, Part 1926 and all subsequent amendments) as promulgated by the U.S. Department of Labor on June 24, 1974 and CFR 29, Part 1910 and all subsequent amendments, General Industry Safety and Health Regulations Identified As Applicable to Construction. Contractors are urged to become familiar with the requirements of these regulations and any amendments thereto.

**.3 Trench Excavation.** On trench excavation that exceeds a depth of five feet, trench excavation protection shall be accomplished as required by the most current provisions of part 1926 subpart P - Excavations, trenching, and shoring - of the Occupational Safety and Health's Standards and interpretations and as further defined in the note(s) on the Plans and other Contract Documents.

**.4 Emergency Work.** In any emergency affecting the safety of persons or property, the Contractor shall act, at his discretion, to prevent threatened damage, injury or loss. Any additional compensation or extension of time claimed by the Contractor resulting from emergency Work shall be considered by Owner in accordance with Items 4 and 8.

**.5 Basic First Aid Service.** The Contractor shall provide, at the site, such equipment and medical facilities as are necessary to supply basic first aid service to anyone who may be injured in connection with the Work. Such equipment shall comply with the most current regulations of the Occupational Safety and Health Administration of the United States Department of Labor.

**.6 Notification of Director of Public Works.** The Contractor must promptly report in writing to the Director of Public Works all accidents whatsoever arising out of, or in connection with, the performance of the Work whether on or adjacent to the site which caused death, personal injury, or property damage, giving full details and any statements of witnesses, if documented. In addition, if death, serious injury, or

serious damage is caused, the accident then shall be reported immediately by telephone or messenger to the Director of Public Works.

**7.8. Sanitary Provisions.** The Contractor shall provide and maintain in a neat, sanitary condition, rest room facilities for the use of his employees and authorized on-site visitors as may be necessary to comply with the requirements and regulations of the City Health Department and of the State Department of Health.

**7.9. Use of Explosives.** The Contractor may employ the use of explosives on City projects provided he strictly adheres to the following conditions:

- .1 For informational purposes only, notify the City Engineer and Consultant in writing of the intended use of explosives on the Project.
- .2 Furnish Commercial General Liability Insurance on an occurrence basis in the amounts specified in accordance with Article 7.5.3.b.7.
- .3 Obtain an "Explosives Permit" from the City Fire Marshal.
- .4 Conform with Chapter 15, Article VIII "Explosives" of the City Code of the City of San Antonio, a copy of which is on file in the Office of the City Clerk.
- .5 Employ a person or persons who possess an individual Explosives Permit and who shall have met the experience requirements of the City Fire Marshal.

**7.10. Barricades and Danger, Warning and Detour Signs and Traffic Handling.** The Contractor shall have the sole responsibility for providing, installing, moving, replacing, maintaining, cleaning and removing upon completion of work all barricades, warning signs, barriers, cones, lights, signals and other such type devices and of handling traffic as shown on the plans or as directed/approved by the Engineer. All barricades, warning signs, barriers, cones, lights, signals and other such type devices shall conform to details shown on the plans or those indicated in the TMUTCD.

- .1 The Contractor may provide special signs not covered by the plans to protect the traveling public against special conditions or hazards, provided, however, that such signs are first approved by the Engineer.
- .2 Upon completion of the work, with the exception of performance test, maintenance and vegetative establishment periods, all standard barricades and signs and other traffic control devices shall be removed by the Contractor. In those instances where the above mentioned periods are still in effect, the Contractor shall utilize temporary traffic control devices conforming to the TMUTCD to accommodate work performed during these periods.
- .3 If, in the opinion of the Engineer, any of the above requirements are not complied with, the Engineer may do such work as he may consider necessary to fulfill these requirements; however, this shall not change the legal responsibilities set forth in this Item. The expense for such work will be borne by the Contractor and the cost thereof shall be deducted from any moneys due the Contractor or to become due to the Contractor.

**7.11. Detour Routes.** A detour route for through traffic as determined by the City is included in the Plans where the proposed construction is located within the limits of a street designated as "Collector," "Secondary" or "Primary." The Contractor shall not begin construction of the Project or close any streets until adequate barricades and detour signs have been provided, erected and maintained in accordance with the detour route and details shown on the Plans. The Contractor shall notify the City's "COI" forty-eight (48) hours in advance of closing any street to through traffic. Local traffic shall be permitted the use of streets under construction where feasible.

**7.12. Responsibility for Damage Claims:**

.1 CONTRACTOR covenants and agrees to FULLY INDEMNIFY and HOLD HARMLESS, the CITY and the elected official, employees, officers, directors, volunteers and representatives of the CITY individually or collectively, from and against any and all costs, claims, liens, damages, losses, expenses, fees, fines, penalties, proceedings, actions, demands, causes of action, liability and suits of any kind and nature, including but not limited to, personal or bodily injury or death and property damage, made upon the CITY directly or indirectly arising out of, resulting from or related to CONTRACTOR's activity under this CONTRACT, including any acts or omissions of CONTRACTOR, any agent, officer, director, representative, employee, consultant or subcontractor of CONTRACTOR, and their respective officers, agents, employees, directors, and representatives while in the exercise or performance of the rights or duties under this CONTRACT, all without, however, waiving any governmental immunity available to the CITY under Texas Law and without waiving any defenses of the parties under Texas Law. IT IS FURTHER CONVENANTED AND AGREED THAT SUCH INDEMNITY SHALL APPLY EVEN WHERE SUCH COSTS, CLAIMS, LIENS, DAMAGES, LOSSES, EXPENSES, FEES, FINES, PENALTIES, ACTIONS, DEMANDS, CAUSES OF ACTION, LIABILITY AND/OR SUITS ARISE IN ANY PART FROM THE NEGLIGENCE OF CITY, THE ELECTED OFFICIALS, EMPLOYEES, OFFICERS, DIRECTORS AND REPRESENTATIVES OF CITY UNDER THIS CONTRACT. The provisions of this INDEMNITY are solely for the benefit of the parties hereto and not intended to create or grant any rights, contractual or otherwise, to any other person or entity. CONTRACTOR shall promptly advise the CITY in writing of any claim or demand against the CITY or CONTRACTOR known to CONTRACTOR related to or arising out of CONTRACTOR's activities under this CONTRACT and shall see to the investigation and defense of such claim or demand at CONTRACTOR's cost. The CITY shall have the right, at its option and at its own expense, to participate in such defense without relieving CONTRACTOR of any of its obligations under this Article.

.2 It is the EXPRESS INTENT of the parties to this contract, that the INDEMNITY provided for in this section, is an INDEMNITY extended by CONTRACTOR to INDEMNIFY, PROTECT and HOLD HARMLESS the CITY from the consequences of the CITY's OWN NEGLIGENCE, provided however, that that INDEMNITY provided for in this section SHALL APPLY only when the NEGLIGENT ACT of the CITY is a CONTRIBUTORY CAUSE of the resultant injury, death, or damage, and shall have no application when the negligent act of the CITY is the sole cause of the resultant injury, death, or damage. CONTRACTOR further AGREES TO DEFEND, AT ITS OWN EXPENSE and ON BEHALF OF THE CITY IN THE NAME OF THE CITY, any claim or litigation brought against the CITY and its elected officials, employees, officers, directors, volunteers and representatives, in connection with any such injury, death, or damage for which this INDEMNITY shall apply, as set forth above.

**7.13. Protection of Private Property.** The City has secured right-of-way and easements, as shown on the plans, to be occupied by the finished construction, with only such additional temporary construction easements as shown for use by the Contractor in carrying out his Work. The Contractor shall take proper measures to protect all property within all construction easements, and adjacent or adjoining property which might be injured by any process of construction; and, in case of any injury or damage, he shall restore at his own expense the damaged property to a condition similar or equal to that existing before such injury or damage was done, or he shall make good such injury or damage in a manner acceptable to the private or public Owner.

.1 The Contractor shall not, except upon procuring written consent from proper private parties, enter or occupy with men, tools, materials, or equipment any privately owned land except for those on easements provided herein by City.

**7.14. Contractor's Responsibilities for Work.** The Contractor shall supervise and direct the Work using his best skill and attention. He shall be solely responsible for all construction means, methods, techniques, sequences and procedures, and for the implementation of safety precautions and for coordinating all portions of the Work under this Contract.

.1 **Quality Control.** In connection with the City's visual observation/inspection of the Work or materials testing contemplated herein, it is clearly understood that the Contractor is responsible for his own quality control inspection and testing services to assure Project compliance with plans, specifications and other included instruments. The Contractor shall give the City's "COI" reasonable advanced notice of the

readiness of any Work for observation/inspection, and when practicable, twenty-four (24) hours notice. If any underground Work is performed without the proper prior notification to the "COI," it shall be uncovered for observation/inspection and properly restored at the Contractor's expense.

**.2 Notification of Discrepancies.** If the Contractor, in the course of the Work, finds any discrepancies between the Plans and the physical conditions of the locality, or any errors or omissions in the Plans or the layout as given by survey points and instructions, he shall immediately inform the City's "COI" and Consultant, in writing, and the Consultant shall promptly investigate the same. Any Work impacted by the discrepancy performed by Contractor after such discovery, until authorized, will be done at the Contractor's risk and/or expense.

**.3 Contractor's Risk.** Contractor shall be responsible for the complete, timely, performance of the Work under this Contract and compliance with the Contract Documents. Contractor shall be responsible for the safe storage and inventory control of all materials on the project site and/or within off-site storage facilities either owned or leased by the Contractor, if any. Contractor shall protect materials and Work from all theft, loss, vandalism, or damage from any cause whatsoever until final Project completion by Contractor and acceptance by Owner; and shall deliver said Work and improvements to the City in a completed and acceptable condition in accordance with the Contract Documents.

**7.15 Electrical Requirements.** Electrical work shall be defined as all work performed, either by bid Item or reference Item under the Items 610, 611, 612, 614, 616, 618, 620, 622, 628, 629, 652, 680 and other Items including special specifications that deal with either the distribution of electrical power greater than 50 volts or the installation of conduit and duct bank. Electrical work includes the installation of traffic signal cables, including connections and wiring of all parts of a traffic signal installation. The installation of the conduit system for communication and fiber optic cables will also be considered electrical work. The conduit and wiring associated with the installation of Item 624, "Ground Boxes" and Item 656, "Foundations," is considered electrical work. Electrical work does not include the installation of the communications or fiber optic cable, or the connections of low voltage and inherently power limited circuits such as electronic equipment or communications equipment. Mechanical assemblage of poles, structures or other hardware, or the placement of poles or structures, cabinets, enclosures or manholes under the above Items will not be considered electrical work as long as no wiring, wiring connections or conduit work is done at that time.

**.1 Special Electrical Work.** Special electrical work is defined as electric work that will include the electrical service and all feeders, sub feeders, branch circuits, controls, raceways and enclosure for all of the following:

- Pump Stations
- Lift Bridges
- Ferry Slips
- Motor Control Centers
- Type D Structure, Asphalt Mix Control Laboratory
- Construction Site Field Offices which will include Types A, B, and C
- Rest Area or other Public Buildings
- Weigh in Motion Stations
- Electrical Services larger than 200 amps or when main or branch circuit breaker sizes are not shown on the plans
- Any Three Phase Electrical Power

**.2 Certified Person.** A certified person is defined as a person that submits the following: A current and valid certification signifying successful completion of the Texas Engineering Extension Service (TEEX) course entitled, "TxDOT Electrical Systems," and passing the associated test, or successful completion of the test only from the above mentioned course.

**.3 Licensed Electrician.** A licensed electrician is a person that submits the following:

- a. A current and valid journeyman's or master's electrical license. The journeyman electrician shall be supervised or directed by a master electrician holding a current and valid master

- electrician license. A master electrician need not be on the project at all times work is being done but shall be the owner of the computer or a full-time employee of the Contractor.
- b. The journeyman and master electrical licenses shall be issued by a city in Texas with a population of 50,000 or greater, that issues licenses based on the passing of a written test and demonstration of experience. Electrical licenses from other cities, inside or outside Texas, or by other states, will be acceptable if approved by the Engineer. In this case, the Contractor shall submit documentation on the requirements for obtaining that license. The Engineer's decision will be based on sufficient evidence that the license was issued based on the Contractor passing a written test that demonstrates in-depth knowledge of the National Electrical Code and sufficient electrical experience commensurate with general standards for a master and journeyman electrician.
  - c. The NEC Test for electrical licenses as described above shall be the Block Test, the Southern Building Code Test, or a test of similar difficulty as determined by the Engineer.

**.4 Electrical Work Requirements.** All workers performing electrical work shall either be licensed electricians or a certified persons as defined above or shall be directly supervised by a person that is either licensed or certified. Directly supervised means that licensed or certified person is present during all electrical work. This requirement applies to work bid under the Items shown above that define electrical work, for electrical work that is subsidiary to other Items of the contract, to other special specifications that involve electrical work, and to conduit and duct banks installed for future use.

- a. Conduit installed in precast concrete is excepted from this requirement if the conduit is placed in accordance with approved working drawings or shop drawings.
- b. For electrical work consisting of the installation of conduit in cast in place concrete sections, a non-certified person may install the conduit but a certified person shall check the installation of the conduit prior to pouring concrete.
- d. All workers performing special electrical work shall be licensed electricians as defined above or shall be directly supervised by a person that is a licensed electrician. Directly supervised means that the licensed person is present during all special electrical work.
- e. Special electrical work performed under a maintenance contract must be done by a licensed electrician. Under a maintenance contract, lamp changes for luminaries and signals, starter aid changes, signal head replacements and laminaire head changes may be done by either a certified person or a licensed electrician. Under a maintenance contract, electrical installation or lighting systems when plans and standard sheets are provided by the City, may be done by either a certified person or licensed electrician. All other electrical work under maintenance contract will be done by a licensed electrician.
- f. Traffic signal cable, indicator, and controller installation and maintenance is exempted from this requirement if the plans specify other electrical certifications such as IMSA certification or the completion of other electrical installation courses. In this case, a certified person will be required only for the conduit, ground box, electrical services, electrical conductor (bid under Item 620), and the pole grounding.
- g. A qualified Contractor need not have an individual with an electrical license or certification to bid on this project but must obtain license or certification prior to beginning electrical work. A copy of licenses or certifications of all persons performing electrical work shall be submitted to the Engineer prior to the beginning of any electrical work.

**7.16. Subcontractors.** The Contractor shall upon executing the Contract, notify the Director of Public Works in writing of the names of all proposed first tier Subcontractors for the Work.

**.1 Subcontractual Relations.** By an appropriate written agreement, the Contractor shall require each Subcontractor, to the extent of the Work to be performed by the Subcontractor, to be bound to the Contractor by the terms of the Contract Documents, and to assume toward the Contractor all the obligations and responsibilities which the Contractor, by these Documents, assumes toward the Owner and the Consultant. Said agreement shall preserve and protect the rights of the Owner and the Consultant under the Contract Documents with respect to the Work to be performed by the Subcontractor so that the subcontracting thereof will not prejudice such rights, and shall allow to the Subcontractor, the benefit of



all rights, remedies and redress against the Contractor that the Contractor, by these Documents, has against the Owner. Where appropriate, the Contractor shall require each Subcontractor to enter into similar agreements with his Sub-subcontractors. The Contractor shall make available to each proposed Subcontractor, prior to the execution of the Subcontract, copies of the Contract Documents to which the Subcontractor will be bound by this Article and identify to the Subcontractor any terms and conditions of the proposed Subcontract which may be at variance with the Contract documents. Each Subcontractor shall similarly make copies of such Documents available to his sub-subcontractor.

**.2 Subcontracting.** The Contractor shall perform work with his own organization on contract bid items amounting to not less than thirty (30) percent of the total original contract price, excluding any specialty items designated by the Engineer. Such specialty items may be performed by subcontract. The amount of any specialty items so performed will be deducted from the total original-contract price before computing the amount of work to be performed by the Contractor's own organization. The cost of equipment counts toward work performed only when the equipment is utilized by the Prime Contractor's employees in performance of the work.

**.3 Perform Work with Own Organization.** The term "perform work with his own organization" refers to workers employed and paid directly by the Prime Contractor and equipment owned or rented by the Prime Contractor, with or without operators. Such term does not include employees or equipment of a subcontractor or lower tier subcontractor, agents of the Prime Contractor, or any other assignees. The term may include payments to an employee leasing firm licensed by the Texas Department of Licensing and Regulation in accordance with Chapter 91 of the Texas Labor Code for non-supervisory personnel when the Prime Contractor maintains control over the day-to-day activities of the leased non-supervisory employees and includes them in the certified weekly payroll submissions for federal-aid projects or payrolls maintained by the Contractor for review by the City on City funded projects.

**.4 Staff Leasing Services.** Staff leasing services provided by employee leasing firms are limited to labor and incidental tools only. In those instances when services provided by an employee leasing firm include materials and/or equipment, the employee leasing firm will be considered a subcontractor and a subcontractor request for approval shall be submitted by the Contractor.

**.5 Specialty Items.** The term "specialty items" refers to work on contract bid items requiring highly specialized knowledge; abilities or equipment not usually available in the type of contracting organizations qualified and expected to bid on the contract as a whole. These specialty items will be designated by the Engineer.

**.4 Costs.** The cost of materials paid by the Prime Contractor counts as work performed by that Contractor only when: said materials are incorporated into the project; and the majority of the value of work involved in incorporating each material into the project is performed using the Contractor's own organization.

**.5 Verification of Direct Payment.** The City reserves the right to require copies of canceled checks and/or certified statements from the Prime Contractor to verify direct payment of labor, equipment, materials and subcontractors sufficient to meet the above requirements.

**.6 Subletting.** The Contractor shall give assurance that the minimum wage for labor and the maximum amount to be deducted for board, if furnished, as stated in the governing provisions shall apply to labor performed on all work sublet. Written consent to sublet any portion of the contract shall not be construed to relieve the Contractor of any responsibility for the fulfillment of the contract.

**.7 Default.** In the case when a Contractor is found to be in default of the contract, the requirement that thirty (30) percent of the work be done by the Contractor is suspended, but City approval of all subcontractors continues to be required.

#### **7.17. Responsibilities to the Railroad Companies.**

**.1 General.** Must meet Railroad permit and insurance requirements.

**.2 Temporary Crossings.** If a temporary crossing is needed, Contractor shall obtain written permission from the railroad company before crossing the tracks. Execute the "Agreement for Contractor's Temporary Crossing" if required by the Railroad Company. Contractor shall ensure that the tracks are left clear of equipment and debris that would endanger the safe operation of railroad traffic. Contractor shall provide a crossing guard on each side of the crossing to direct equipment when hauling across the tracks.

- a. Contractor shall stop construction traffic a safe distance away from the crossing upon the approach of railroad traffic.
- b. Work for temporary crossings will not be paid for directly, but is subsidiary to Items of the Contract. Work performed by the railroad company for the temporary crossing, except flaggers, will be at the Contractor's expense.

**7.18. Assignments and Subletting.** Contractor shall not assign, transfer, convey, sublet or otherwise dispose of this Contract, or any portion thereof, or any right, title or interest in, to or under the same, without the previous written consent of the City. The Contractor shall not assign by power of attorney or otherwise any of the monies or other considerations to become due and payable by the City under this Contract, without the previous written consent of the City. In no event shall the City be liable in excess of the consideration of this Contract in the case of any such assignment, transfer, conveyance or subletting of the Work or performance which is the subject hereof.

**.1** The City reserves the right to withhold any monthly payment hereafter provided for in the event of an assignment or subletting of a portion of the work without the previous consent and knowledge of the City and by reserving such right, the City shall not be deemed to have waived its right to declare a full breach of this Contract for Contractor's failure to comply with provisions hereof, such remedy being alternative only and exercisable at the option of the City.

**7.19. Preservation of Cultural Resources, Natural Resources and the Environment.** For all project specific locations (PSL's) (material sources, waste sites, parking areas, storage areas, field offices, staging areas, haul roads, etc.), the Contractor certifies by signing this contract that he and all subcontractors will comply with all applicable laws, rules and regulations pertaining to the preservation of cultural resources, natural resources, and the environment as issued by the following or other agencies:

U.S. Department of Transportation  
U.S. Army Corps of Engineers  
U.S. Federal Emergency Management Agency  
U.S. Fish and Wildlife Service  
U.S. Environmental Protection Agency  
Texas Department of Transportation  
Texas Historical Commission  
Texas Parks and Wildlife Department  
Texas Commission on Environmental Quality (TCEQ)

**.1** The Contractor and all subcontractors will be required to maintain documentation of certification activities including environmental consultant reports, Contractor documentation on certification decisions, contacts with the resource agencies, and correspondence with the pertinent resource agency. This documentation will be provided upon request.

**7.20. Abatement and Mitigation of Excessive or Unnecessary Construction Noise.** Contractor will ensure abatement and mitigation of excessive or unnecessary construction noise as prescribed by all applicable state and local laws.

**7.21. Public Utilities.** The Contractor's attention is hereby specifically directed to the information regarding the existing public utility structures, lines and mains which are known to exist and may be encountered within and/or adjacent to the limits of the Work covered by this Contract. The existence and location of underground utilities

indicated on the Plans are taken from the most current utility records available to the Consultant but are not guaranteed by Owner or Consultant nor do they indicate the location of private service lines, but shall be investigated and field verified by the Contractor and appropriate utility companies before starting Work. All utility companies have been furnished with Plans of the proposed construction. The Contractor is reminded that maintaining continuity of utility service to customers is critical.

**.1 Work Clearance Zones.** "Work Clearance Zones," as used hereinafter, shall be considered to be the distance on the horizontal axis from the edge of pipe, box or other construction to the outside edge of the excavation shown on the Plans or details or to the outside edge of Contractor's Trench Excavation Protection System. The vertical restrictions of the Work Clearance Zone are subject to excavation limits as shown on the Plans and/or height limitations as required by State statutes. Underground utilities within the Work Clearance Zone are considered to be in conflict with the intended Work and will generally be adjusted by the respective utility at no cost to the Contractor. In the event that existing conflicting utilities cannot be relocated, see Article 7.21.4.

**.2 Temporary Clearance.** Temporary clearance of high voltage (600 volts and above) and overhead electrical lines is required prior to the operation of equipment within 10 feet of such lines (VTCS 1436C, Sec. 5A & 6). At his own expense, the Contractor shall obtain the necessary temporary clearance from the high voltage line operator or utility company. Temporary clearance shall be a temporary barrier separating and preventing contact of material, equipment, persons, communications with high voltage electrical lines, or temporary de-energization and grounding or temporary relocation, or raising of the lines.

**.3 Contractor's Responsibility.** The Contractor shall be responsible for any damage to, and protection of existing utilities where shown on the Plans and/or verified by the utility company in the field. Any existing utilities, which cannot be relocated and must remain in service within the Work Clearance Zone are shown on the Plans and shall be protected by the Contractor as part of the original Bid Proposal Price submitted by Contractor. Any damage caused to utilities within the Work Clearance Zone due to neglect on the part of the Contractor, or his Subcontractors, shall be repaired by the utility company and paid for by the Contractor or his Subcontractor. Temporary relocation of utilities by utility companies for the Contractor's convenience shall be paid by the Contractor directly to the affected utility company.

**.4 Utilities' Responsibility.** Prior to the start of construction, the utility companies shall have adjusted their respective utilities to provide proper clearance for the Project. Prior to start of construction, the utility companies shall inform the Contractor of any remaining adjustments that have not been completed. The utility company shall cooperate with the Contractor to expedite the utility company's adjustment of any remaining utilities so as not to cause a delay to the Contractor. The Contractor shall not be responsible for repair of Contractor-damaged utilities which are not shown on the Plans and/or by subsequent utility company field verification and which lie within the horizontal and vertical limits of construction.

**.5 Utilities on Street Projects.** The utility companies have adjusted their utility lines for street construction with the exception of manholes, vaults, and valves. The utilities shall create a horizontal and vertical Work Clearance Zone on Street Projects by adjusting their respective facilities at no cost to the Contractor so as not to interfere with the eventual vehicular traffic and/or installation of curbs and sidewalks.

**.6 Utilities on Storm and Sanitary Sewer Projects.** The utility companies have adjusted their utility lines for the sewer line to be constructed. However, in some instances and as shown on the Plans, adjustment of the utility lines by this Contractor, or a separate contractor, or by City forces will be required concurrently with the construction of the sewer by this Contractor. In these instances the utility companies will be required to cooperate fully with the Contractor in accomplishing these adjustments so as to minimize any delays in the Contractor's progress and inconveniences to the City.

- a. In the case of sewer, water, gas, electric, telephone, cablevision cable, or any other utility line which is shown on the Plans, within or crossing the Work Clearance Zone, and which must

remain in service, it shall be the responsibility of the utility company, with the cooperation of the Contractor, to determine the exact location of the utility line. The Contractor will use care in excavating over, under and around such lines and will provide all necessary temporary bridging during construction so as to maintain continuous service of the utility line. The Contractor shall backfill around the main and complete his construction operations in such a manner as to leave the utility line firmly and securely bedded in its original position without damage to any protective coatings.

- b. In instances where gas or water mains are exposed during construction, the utility company owning or operating the service shall be given at least twenty-four (24) hours notice by the Contractor prior to backfilling so the protective coating on the mains may be inspected and/or repaired by utility company. If repairs are necessary, all costs incurred are to be borne by Contractor.

**.7 Bracing and Supporting.** In areas where utilities are known to be near the outside edge of the Work Clearance Zone and could be damaged by soil movement, slips or cave-ins, the Contractor shall take all precautions necessary to protect such utilities from damage and shall pay for the repair of any such damages caused by Contractor failure to properly protect the utility.

**7.22. Work in Waters of the United States.** Where it becomes necessary for the Contractor to work in waters of the United States or their adjacent wetlands as delineated by the U.S. Army Corps of Engineers, the Contractor should be aware that a Section 404 permit may be required. The City will obtain any Section 404 permits prior to commencement of construction on a project-by-project basis. The Contractor will be required to adhere to any agreements, mitigation plans and standard best management practices required for a permit on any project. If the Contractor makes changes in the project construction method that would result in changes of project impacts to waters of the U.S., the Contractor will notify the City in writing and be responsible for any new Section 404 permit.

**7.23. Work in Navigable Waters.** Any operations by the Contractor relating to the placement of embankment into, or the placement or rehabilitation of structures in or over navigable waters of the U.S. as designated by the U.S. Army Corps of Engineers or the U.S. Coast Guard, is subject to regulation by these agencies. Approval will be coordinated by the City and construction should not commence until the activity is approved by the regulatory agency. The Contractor will be required to adhere to the stipulations of the permit and the associated best management practices. If the Contractor makes changes in the project construction method that would result in changes of project impacts to navigable waters of the U.S., the Contractor will notify the City in writing and be responsible for any new Section 9 permit from the U.S. Coast Guard.

**7.24. Work Over the Recharge Zone of Protected Aquifers.** Relating to work over the recharge zones of protected aquifers as defined and delineated by the Texas Water Commission (TWC), the Contractor shall make every reasonable effort to minimize the degradation of water quality resulting from construction impacts in accordance with all applicable state and local laws. The Contractor will be required to follow best management practices and to use and maintain those sedimentation and water pollution control devices as required by the Engineer.

- .1 If a Water Pollution Abatement Plan (WPAP) is required by the TWC, modification to the approved WPAP by the Contractor will require the Engineer's approval and be coordinated through the City with the TWC.

**7.25. Excluded Parties.** The Bidder certifies by signing this bid proposal, that if awarded the contract for the work covered by this bid proposal, he shall not enter into any subcontract with a subcontractor that is debarred or suspended by any federal agency.

## ITEM 8

### PROSECUTION AND PROGRESS

**8.1. Prosecution of Work.** Prior to beginning construction operations, a preconstruction conference between the Contractor and the City will be conducted. The Contractor shall begin the work to be performed under the contract within seven (7) calendar days after the date of the authorization to begin work as shown on the work order and shall continuously prosecute same with such diligence as will enable the completion of the work within the time limit specified. The Contractor shall notify the City at least twenty-four (24) hours before beginning work and any new operation. The Contractor shall not start new operations to the detriment of work already begun. The prosecution of the work shall be conducted in such a manner as to impose minimum interference to traffic. The contract time requirement is a key factor to both the City and the Contractor. All time limits stated in the Contract Documents are of the essence of the Contract.

**8.2. Commencement of Work.** The Work called for in this Contract shall be commenced by Contractor within seven (7) calendar days after receipt by the Contractor of City-issued, written Authorization To Proceed. Under no circumstances shall the Work commence prior to Contractor's receipt of City-issued, written Authorization To Proceed. Computation of Contract Time will begin upon actual commencement of Work by the Contractor during the seven (7) calendar day period referenced above or upon the eighth (8th) calendar day (assuming the eighth (8<sup>th</sup>) calendar day is a day upon which Work may lawfully and Contractually be performed), whichever occurs first.

**8.3. Working Hours.** No Work, with the exception of such items as curing of concrete, maintenance of barricades, etc., will be allowed by Owner between the hours of 7:00 p.m. and 6:00 a.m. of the following day, unless directed by Owner or requested in writing by Contractor and approved by the Director of Public Works. Nighttime work is allowed only when shown on the plans or directed or allowed by the Engineer. Nighttime work is defined as work performed from thirty (30) minutes after sunset to thirty (30) minutes before sunrise.

**8.4. Completion of Work.** After commencement of Work, the Contractor shall prosecute the Work continuously, diligently and uninterruptedly throughout the Contract Time period, during which period of time Contractor binds and obligates himself, his Subcontractors and suppliers at all times to employ sufficient Work force and supervisory diligence to complete said structures, Work and improvements, and to deliver same over to the City in a timely acceptable, completed, undamaged and clean condition. The time of beginning, rate of progress and time of completion of said Work are hereby declared by Owner and understood by Contractor to be "OF THE ESSENCE" to this Contract. The Director of Public Works may suspend said Work either partially or totally as provided for Article 8.6.

**8.5. Railroad Construction.** As per railroad permit requirement.

#### **8.6. Suspension of Work by Owner**

.1 The Director of Public Works may suspend said Work either partially or totally by his written order whenever in his opinion the interests of the City requires the suspension of such Work. In the event that the Director of Public Works totally suspends Project Work, the Contractor hereby acknowledges and agrees that so long as the total suspension(s) is (are) for a period not to exceed ten (10) cumulative calendar days accruing throughout the entire Contract Time, that the Contractor is not entitled to request a negotiated adjustment of the Contract Sum nor an extension of the Contract Time. Such right to totally suspend Project Work for period(s) not to exceed ten (10) cumulative calendar days accruing throughout the entire Contract Time without compensation to the Contractor is expressly reserved by the City.

.2 Any total suspension of Project Work by the Director of Public Works that extends beyond ten (10) cumulative calendar days accrued throughout the entire Contract Time, shall entitle the Contractor to request either a negotiated adjustment of Contract Sum or an extension of Contract Time, or both, as directly attributable to such extended total suspension of Project Work.

.3 Any partial suspension of the Work by the Director of Public Works that extends beyond the mutually determined point in time when the ten (10) cumulative calendar days accruing throughout the entire Contract Time, are effectively exceeded, shall entitle the Contractor to request either a negotiated adjustment of Contract Sum or an extension of Contract Time, or both, as directly attributable to such extended partial suspension of Project Work.

- a. In the event that the Director of Public Works partially suspends the Work in such a manner that some Work is able to continue, the Contractor and City hereby agree to discuss the impact of the partial suspensions upon dependent Contract Work, and to mutually determine when the ten (10) cumulative calendar days accruing throughout the entire Contract Time and expressly reserved by the City without compensation to the Contractor, would effectively be exceeded.
- b. The City's "COI" shall have the right to stop the Work whenever such stoppage may be necessary to insure proper execution of the Contract. Such temporary stoppage shall be followed by a Written Order as outlined in Article 8.6.1.

**8.7. Contract Time Statement.** The Director of Public Works, or his authorized representative shall furnish a "Contract Time Statement" to the Contractor after the end of each calendar month showing the number of Calendar Days charged by Owner and of such non-chargeable Days credited to the Contractor during each month. Such statement shall become final and binding upon the Contractor without exception, unless Contractor notifies the Director of Public Works in writing of any Contract Time Statement discrepancies claimed by the twentieth (20th) calendar day following Owner issuance date on the Contract Time Statement.

**8.8 Failure to Complete Work On Time.** If the Contractor fails to complete the Contract in the time specified by Owner in the Contract Documents and agreed to by Contractor through execution of this Contract, Contract Time charges will continue to be made for each Calendar Day thereafter. The time set forth in the Contract for the completion of the Work is an ESSENTIAL ELEMENT of the Contract. For each Calendar Day that any Work shall not be complete after the expiration of the Calendar Days specified in the Contract (to include Calendar Days charged for correction of Contractor deficiencies found during the final inspection), plus, any extended calendar days allowed by Owner, the amount of liquidated damages assessed per day as stipulated in the Contract will be deducted from the money owed or to become due the Contractor, not as a penalty but as liquidated damages owed the City for extended expenses, loss and public inconvenience resulting from Contractor's failure to complete said Work within the Time Contractor agreed to by execution of this Contract. Contractor and City agree that such liquidated damages are as set prior to the Contract execution for projected reasonable costs that are otherwise difficult for either Party to forecast and will be incurred by the City due to Contractor completion beyond the number of Days Calendar Days calculated herein by the City.

**8.9. Workers and Equipment.** The Contractor shall furnish such suitable machinery, equipment and construction forces as may be necessary, in the opinion of the Engineer, for the proper prosecution of the work, and failure to do so may cause the Engineer to withhold all estimates, which have or may become due and suspend the work until his requests are complied with. All workers employed by the Contractor shall have such skill and experience as will enable them to properly perform the duties assigned. Any person employed by the Contractor or a subcontractor who, in the opinion of the Engineer, does not perform his work in a proper and skillful manner or who is disrespectful, intemperate, disorderly or otherwise objectionable, shall, at the written request of the Engineer, be forthwith discharged and shall not be employed again on any portion of the work without the written consent of the Engineer.

**.1 Flaggers.** The Contractor shall have a company representative that has received flagger training through courses such as those offered by the Texas Engineering Extension Service (TEEX) or the American Traffic Safety Services Association (ATSSA). This representative shall be responsible for training or assuring that all flaggers used on this project are qualified to perform flagging duties. A certificate indicating completion of such course shall be available to the Engineer if requested.

- a. A qualified flagger is one that has attended courses such as those offered by TEEX, ATSSA, or through training provided by the trained official mentioned above. A list of all qualified flaggers shall be provided to the Engineer prior to beginning any flagging activities. Any modifications to this list shall also be provided to the project Engineer. Any flagger being used

who is not included on the list as provided to the Engineer shall be removed from flagging duties and replaced with one who is qualified and included on the list.

**8.10. Termination for Convenience.** The City may terminate the contract in whole or in part whenever:

- a. The Contractor is prevented from proceeding with the work as a direct result of an executive order of the President of the United States or the Governor of the State.
- b. The Contractor is prevented from proceeding with the work due to a national emergency and when the work to be performed under the contract is stopped directly or indirectly because of the freezing or diversion of materials, equipment or labor, as the result of an order or a proclamation of the President of the United States or an order of any Federal Authority.
- c. The Contractor is prevented from proceeding with the work by reason of a preliminary, special, or permanent restraining order of a court of competent jurisdiction where the issuance of the restraining order is primarily caused by acts or omissions of persons or agencies other than the Contractor.
- d. The City determines that termination of the contract is in the best interest of the City or the public. This includes but is not limited to the discovery of significant hazardous material problems, right of way acquisition problems, or utility conflicts that would cause substantial delays and/or expense to the project.

**.1 Procedures and Submittals.** The Engineer will deliver to the Contractor a Notice of Termination specifying the extent of termination and the effective date. After receipt of a Notice of Termination the Contractor shall immediately proceed with the following obligations:

- a. Stop work as specified in the notice.
- b. Place no further subcontracts or orders for materials, services, or facilities, except as necessary to complete the continued portion of the contract.
- c. Terminate all subcontracts to the extent they relate to the work terminated.
- d. Complete performance of the work not terminated.
- e. Settle all outstanding liabilities and termination settlement proposals resulting from the termination for public convenience of this contract.
- f. Create an inventory report for the Engineer of all acceptable materials and products obtained by the Contractor for the contract that have not been incorporated in the work that was terminated. The inventory report will include a description, quantity, source and cost for each of the acceptable materials and products. In addition, the report will indicate whether the City has already compensated the Contractor for the materials or products through a previous material on hand payment.
- g. The Contractor shall take any action necessary, or that the Engineer may direct, for the protection and preservation of the materials and products related to the contract that are in the possession of the Contractor and in which the City has or may acquire an interest.

**.2 Settlement Provisions.** When contracts, or any portion thereof, are terminated, and the Contractor is released before all items of work included in the contract have been completed, the Contractor shall submit, within one hundred eighty (180) calendar days of the date of the notice of termination, a final termination settlement proposal to the City with the intent being that an equitable settlement will be made. The Contractor shall maintain and make available all project cost records to the City to the extent necessary to determine the validity and amount of each item claimed. The Engineer will prepare a change order that reduces the affected quantities of work and adds acceptable costs for termination. No claim for loss of anticipated profits shall be considered. The City will pay for:

- a. All work completed at the unit bid price and partial payment for incomplete work.
- b. Reasonable demobilization costs;
- c. Accounting, legal, clerical and other expenses reasonably necessary for the preparation of termination settlement proposals and support data;
- d. The termination and settlement of subcontracts, including yard and material leases;

- e. Storage, transportation, restocking and other costs incurred reasonably necessary for the preservation, protection, or disposition of the termination inventory.

**.3 Failure to Submit Proposal.** If the Contractor fails to submit the proposal within the time allowed, the City may determine the amount due to the Contractor and make compensation.

**.4 Failure To Agree On Settlement Amount.** If the Contractor and the City fail to agree on the settlement amount, the Contractor may file a formal claim with the City in accordance with the contract claim procedure.

**.5 Materials.** If the contract is terminated, acceptable materials obtained by the Contractor for the work that have been inspected, tested and accepted by the Engineer and that are not incorporated in the work, will be purchased from the Contractor at the actual cost as shown by receipts and the actual cost records at such points of delivery as may be designated by the Engineer.

**.6 Surety.** Termination of a contract, as stated above, will not relieve the Contractor or his Surety of the responsibility of replacing defective work as required by the contract.

#### **8.11. Contract Termination:**

**.1 Termination by Contractor.** If the Work is stopped by City for a period of ninety (90) consecutive calendar days under an order of any court or other public authority having jurisdiction, or as a result of an act of a higher governmental authority, such as a declaration of a national emergency making materials unavailable, through no act or fault of the Contractor or a subcontractor or their agents or employees or any other persons performing any of the Work under a contract with the Contractor, then the Contractor may upon ten (10) additional calendar days written notice to the City and the Consultant, terminate the Contract and recover from the Owner payment for all Work previously executed and for any loss sustained upon any materials, equipment, tools, construction equipment and machinery, including reasonable profit and damages related to the Work stoppage. If the Work is recommenced during the ten (10) calendar day notice period, the Contractor may not terminate the Contract but may still pursue a delay claim with the City.

**.2 Termination by Owner.** If the Contractor is adjudged as bankrupt, or if he makes a general assignment for the benefit of his creditors without the consent of the City or if a receiver is appointed on account of his insolvency, or if he persistently or repeatedly refuses or fails except in cases for which extension of time is provided, to supply enough properly skilled workmen or proper materials, or persistently disregards laws, ordinances, rules, regulations or orders of any public authority having jurisdiction pertaining to the Work, or otherwise is guilty of a substantial violation of a provision of the Contract Documents warranting Owner default of Contractor, then the Owner may, without prejudice to any right or remedy and after giving the Contractor and his Surety, if any, ten (10) calendar days written notice, terminate the employment of the Contractor and/or take possession of the site and of all materials, and may upon order of a court of competent jurisdiction take possession of equipment, tools, construction equipment and machinery thereon owned by the Contractor. Should the Surety fail to pursue completion of the Work with reasonable speed, the Owner may arrange for completion of the Work and deduct the cost thereof from the unpaid Contract Sum remaining, including the cost of additional Owner administration and Consultant services made necessary by such default or neglect, in which event no further payment shall then be made by the Owner until all cost of completing the Work shall have been paid.

**.3 Unpaid Balance.** If the unpaid balance of the Contract Sum exceeds the costs of finishing the Work, including compensation for the Consultant's additional services made necessary thereby, such excess shall be paid to the Contractor. If such costs exceed the unpaid balance, the Contractor or his surety shall pay the difference to the Owner. This obligation for payment shall survive the termination of the Contract.



**8.12 Critical Path Method Project Schedule.** The Contractor shall create and maintain a Critical Path Method (CPM) Project Schedule showing the manner of prosecution of work that he intends to follow in order to complete the contract within the allotted time. The project schedule shall employ computerized CPM for the planning, scheduling and reporting of the work as described in this specification. The CPM project schedule shall be prepared using the Precedence Diagram Method (PDM). The Contractor shall create and maintain the schedule using Suretrack. The observance of the requirements herein is an essential part of the work to be done under the contract. No direct compensation will be allowed for fulfilling these requirements, as such work is considered subsidiary to the various bid items of the contract.

**.1 Personnel.** The Contractor shall provide an individual, referred to hereafter as the Scheduler, to create and maintain the Project Schedule. The Scheduler shall be proficient in CPM analysis and shall be able to perform required tasks on the specified software. The Scheduler shall be made available for discussion or meetings when requested by the City.

**.2 Project Schedule.** At least twenty (20) calendar days prior to the preconstruction conference, the Contractor shall submit a Project Schedule which shall show the sequence and interdependence of activities required for complete performance of the work. All schedule submittals shall be in the electronic form. The Contractor may submit the schedule via electronic mail, CD-Rom, floppy disc, or any other electronic media acceptable to the City. The City will review the Project Schedule within twenty (20) calendar days for compliance with the specifications and notify the Contractor at the conference of its acceptability. No work shall begin until the Project Schedule has been accepted by the City.

- a. The Project Schedule shall show the sequence and interdependence of activities required for complete performance of the work. The Contractor shall be responsible for assuring all work sequences are logical and show a coordinated plan of the work. The purpose of the City requiring the Project Schedule shall be to:
  - i. Ensure adequate planning during the prosecution and progress of the work in accordance with the allowable number of calendar days and all milestones;
  - ii. Assure coordination of the efforts of the Contractor, City, Utilities and others that may be involved in the project;
  - iii. Assist the Contractor and City in monitoring the progress of the work and evaluating proposed changes to the contract; and,
  - iv. Assist the City in administering the contract time requirements.
- b. Each activity on the Project Schedule shall be described by: an activity number utilizing an alphanumeric designation system tied to the traffic control plans, and that is agreeable to the City; concise description of the work represented by the activity; and, activity durations in whole calendar days with a maximum of twenty (20) calendar days. Durations greater than twenty (20) calendar days may be used for non-construction activities (mobilization, submittal preparation, curing, etc.), and other activities mutually agreeable between the City and Contractor. The Contractor shall provide to the City a legend for all abbreviations. The activities shall be coded so that organized plots of the Project Schedule may be produced. Typical activity coding includes traffic control phase, location and work type. Activity durations shall be based on the quantity for the individual work activity divided by a production rate.
- c. Seasonal weather conditions shall be considered and included in the Project Schedule for all work influenced by temperature and/or precipitation. Seasonal weather conditions shall be determined by an assessment of average historical climatic conditions. Average historical weather data is available through the National Oceanic and Atmospheric Administration (NOAA). These effects will be simulated through the use of work calendars for each major work type (i.e., earthwork, concrete paving, structures, asphalt, drainage, etc.). Project and work calendars should be updated each month to show days actually able to work on the various work activities.
- d. If specified by general note, the Contractor shall plan and incorporate major resources into the Project Schedule. Major resources are defined as crews and equipment that constrain the Contractor from pursuing available work. The resources shall accurately represent the

Contractor's planned equipment and manpower to achieve the productivity rates specified above.

- e. Total float is defined as the amount of time between the early start date and the late start date, or the early finish date and the late finish date, for each and every activity in the schedule. Float time in the Project Schedule is a shared commodity between the City and the Contractor.
- f. Only City responsible delays in activities that affect milestone dates or the contract completion date, as determined by CPM analysis, will be considered for a time extension.

**.3 Joint Review, Revision and Acceptance.** Within twenty (20) calendar days of receipt of the Contractor's proposed Project Schedule, the City shall evaluate the schedule for compliance with this specification, and notify the Contractor of its findings. If the City requests a revision or justification, the Contractor shall provide a satisfactory revision or adequate justification to the satisfaction of the City within seven (7) calendar days. If the Contractor submits a Project Schedule for acceptance, which is based on a sequence of work not shown in the plans, then the Contractor shall notify the City in writing, separate from the schedule submittal.

- a. The City's review and acceptance of the Contractor's Project Schedule is for conformance to the requirements of the contract documents only. Review and acceptance by the City of the Contractor's Project Schedule does not relieve the Contractor of any of its responsibility for the Project Schedule or of the Contractor's ability to meet interim milestone dates (if specified) and the contract completion date, nor does such review and acceptance expressly or by implication warrant, acknowledge or admit the reasonableness of the logic, durations, manpower or equipment loading of the Contractor's Project Schedule. In the event the Contractor fails to define any element of work, activity or logic and the City review does not detect this omission or error, such omission or error, when discovered by the Contractor or City shall be corrected by the Contractor at the next monthly schedule update and shall not affect the project completion date.

**.4 Updates.** The Project Schedule shall be updated on a monthly basis. The Project Schedule update shall be submitted on the tenth (10<sup>th</sup>) day of each month. The Contractor shall meet with the City each month at a scheduled update meeting to review actual progress made through the data date of the schedule update. The review of progress will include dates activities actually started and/or completed, and the percentage of work completed or remaining duration on each activity started and/or completed. The percentage of work complete shall be calculated by utilizing the quantity and productivity rate information.

**.5 Project Schedule Revisions.** If the Contractor desires to make major changes in the Project Schedule, the Contractor shall notify the City in writing and submit the proposed schedule revision. The written notification shall include the reason for the proposed revision, what the revision is comprised of, and how the revision was incorporated into the schedule. Major changes are hereby defined as those that may affect compliance with the contract requirements or those that change the critical path. All other changes may be accomplished through the monthly updating process without written notification.

**.6 Time Impact Analysis.** The Contractor shall notify the City when an impact may justify an extension of contract time or adjustment of milestone dates. This notice shall be made in writing as soon as possible, but no later than the end of the next estimate period after the commencement of an impact or the notice for a change is given to the Contractor. Not providing notice to the City within twenty (20) calendar days after receipt will indicate the Contractor's approval of the time charges as shown on that time statement. Future consideration of that statement will not be permitted and the Contractor forfeits his right to subsequently request a time extension or time suspension unless the circumstances are such that the Contractor could not reasonably have knowledge of the impact by the end of the next estimate period.

- a. When changes are initiated or impacts are experienced, the Contractor shall submit to the City a written time impact analysis describing the influence of each change or impact. A "time impact analysis" is an evaluation of the effects of changes in the construction sequence, contract, plans,

or site conditions on the Contractor's plan for constructing the project, as represented by the schedule. The purpose of the time impact analysis is to determine if the overall project has been delayed, and if necessary, to provide the Contractor and the City a basis for making adjustments to the contract.

- b. A time impact analysis shall consist of one or all of the steps listed below:
  - Step 1.* Establish the status of the project before the impact using the most recent project schedule update prior to the impact occurrence.
  - Step 2.* Predict the effect of the impact on the most recent project schedule update prior to the impact occurrence. This requires estimating the duration of the impact and inserting the impact into the schedule update. Any other changes made to the schedule including modifications to the calendars or constraints shall be noted.
  - Step 3.* Track the effects of the impact on the schedule during its occurrence. Note any changes in sequencing, and mitigation efforts.
  - Step 4.* Compare the status of the work prior to the impact (Step 1) to the prediction of the effect of the impact (Step 2), and to the status of the work during and after the effects of the impact are over (Step 3). Note that if an impact causes a lack of access to a portion of the project, the effects of the impact may extend to include a reasonable period for remobilization.
- c. The time impact analysis shall be electronically submitted to the City. If the Project Schedule is revised after the submittal of a time impact analysis but prior to its approval, the Contractor shall promptly indicate in writing to the City the need for any modification to its time impact analysis. One (1) copy of each time impact analysis shall be submitted within fourteen (14) calendar days after the completion of an impact. The City may require Step 1 and Step 2 of the time impact analysis be submitted at the commencement of the impact, if needed to make a decision regarding the suspension of contract time. Approval or rejection of each time impact analysis by the City shall be made within fourteen (14) calendar days after receipt unless subsequent meetings and negotiations are necessary.

## ITEM 9

### MEASUREMENT AND PAYMENT

**9.1. Estimated Quantities and Measurement.** The estimated quantities of the various elements of Work to be done and material to be furnished are approximate only and are provided by Consultant and Owner as a basis for Owner comparison of bid proposals and award of Contract. It is expressly understood and agreed by Owner and Contractor that the actual amounts of Work to be done and material to be furnished may differ somewhat from these estimates. The quantities of Work actually performed by Contractor will be computed on the basis of measurements taken by the Owner's representatives, and these measurements shall be final and binding on Contractor.

**9.2 Plans Quantity Measurement.** Plans Quantity Measurement. When plans quantity measurement is specified for an item, adjustment of quantities will be made by the following:

If the quantities measured as outlined under "Measurement" vary from those shown in the bid proposal and on the "Estimate and Quantity" sheet by more than five (5) percent (or as stipulated under the measurement Paragraph for the Item), either party to the contract may request, in writing, an adjustment of the quantities by each separate bid item, except that when stated in the particular item, the adjustment will be made based upon a designated element shown in the Item. The party to the contract which requests the adjustment shall present, to the other, one copy of field measurements and calculations showing the revised quantities in question. These revised quantities, when approved by the Engineer, together with all other quantities under the same bid item, shall constitute the final quantity for which payment will be made.

.1 When quantities are revised by a change in design, the "Plan Quantity" will be increased or decreased by the amount involved in the design change through a Field Alteration.

.2 Payment for revised quantities will be paid for at the unit price bid for that bid item, except as provided for in Article 4.2.

**9.3. Progress Payments.** Each month as the Work progresses on all City Contracts regardless of Contract Sum, said Director of Public Works, or his designated representatives, and Contractor shall determine the cost of the labor and materials incorporated into the Work during that month and actual invoiced cost of Contractor acquired materials stored on the Project site, and/or within off-site storage facilities either owned or leased by the Contractor. Upon receipt of a complete and mathematically accurate Construction Estimate Certification Form from the Contractor, the City shall make payments to Contractor within thirty (30) calendar days on Contracts totaling four hundred thousand (\$400,000.00) dollars or less, based upon such cost determination and at the Contract unit prices in a sum equivalent to ninety (90) percent of each such invoice. At the time the last monthly invoice is paid by Owner, a Letter of Conditional Approval may be furnished to the Contractor. The remaining ten (10) percent retainage shall be held by the City until the final Contract Settlement. However, where the Contract amount exceeds four hundred thousand dollars (\$400,000.00), installments shall be paid to Contractor at the rate of ninety-five (95) percent of each monthly invoice within thirty (30) calendar days of Owner receipt of a complete and mathematically accurate Construction Estimate Certification Form from the Contractor, and the retainage held until final Contract Settlement shall be five (5) percent. The payments of such installments are payments toward satisfaction of the Contract Sum, and the Contractor invoices upon which such monthly payments are based, are given to Owner by Contractor only for the purposes of fixing the periodic sums to be paid in compliance with Article 9.1. Owner's payment of installments shall not in any way be deemed to be a final acceptance of any part of the Work by Owner, and will not prejudice Owner in the final settlement of Contract account nor relieve the Contractor from completion of the Work as herein provided.

.1 **Subcontractors.** The Contractor shall pay the subcontractor for work performed within ten (10) days after the Contractor receives payment for the work performed by the subcontractor. Also, any retained monies on a subcontractor's work shall be paid to the subcontractor within ten (10) days after satisfactory completion of all the subcontractor's work. Completion of all the subcontractor's work shall include test, maintenance and other similar periods that are the responsibility of the subcontractor.

- a. For the purpose of this Item, satisfactory completion shall have been accomplished when: (1) The subcontractor has fulfilled the contract requirements of both the Department and the subcontract for the subcontracted work, including the submission of all submittals required by the specifications and the Department; and, (2) The work done by the subcontractor has been inspected and approved by the Department and the final quantities of the subcontractor's work have been determined and agreed upon.
- b. The inspection and approval of a subcontractors work does not eliminate the Contractor's responsibilities for all the work as defined in Item 7.
- c. The above requirements are also applicable to all sub-tier subcontractors and the above provisions shall be made a part of all subcontract agreements.

.2 Failure to comply with any of the above requirements may cause the Engineer to withhold all estimates which have or may become due and the Engineer may suspend the work until his requests are complied with.

.3 For contracts that provide for a separate vegetative establishment, maintenance, or performance period following the completion of all other construction of the improvement, the Department may release a portion of the amount retained provided all other work is completed as determined by the Engineer. Prior to such release, all submissions and final quantities must be completed and accepted for all the other work. The amount retained after such release shall be sufficient to ensure compliance with the contract.

**9.4. Payment for Extra Work.** Extra work ordered, performed and accepted will be paid for in accordance with the method described below:

**.1 Unit Price.** Submitted by the Contractor in the original Contractor Bid Proposal as part of the base bid or as a designated additive or deductive alternate, and if agreed to by the Contractor and the Owner, appropriately adjusted either upward or downward to reflect any increases or decreases in the amount of labor, material or equipment as they relate to Major Bid Items.

**.2 Agreed Contract Change.** Lump Sum Agreement between Owner and Contractor as to the price, quantity and time for changes in the Work.

**.3 The cost of such extra Work shall be added to the Contract Sum by a Written Alteration.**

**9.5 Force Account.** If no Agreed Contract Change or unit price can be reached after good faith negotiations between the City and Contractor, the Owner may direct the Work be performed by the Contractor on a Force Account basis, and payment by the City shall be upon the basis of Actual Cost of the Work plus the participation allowances as specified below. When extra work is ordered to be performed on a "Force Account" basis, payment for same will be made as follows:

- a. The Contractor and the City will agree in writing before beginning the work on the rate of wage, which the Contractor will receive for all labor and foremen. The Contractor will be paid said rate for each hour that the labor and foremen are actually engaged in the work except that in the event that the particular laborers and foremen anticipated to be used in the work are not available then the individuals involved in the work will be reimbursed at the rate shown on the payrolls. In no case will the rate of wage be less than the minimum shown in the contract for a particular category. The Contractor will receive an additional twenty-five (25) percent as compensation based on the total wages paid said laborers and foremen. The only exception to the percent amount of compensation is for payment of the provisions outlined in the general notes, concerning off-duty peace officers and patrol cruisers, which shall be based on the invoice amount plus five (5) percent. No charge will be made by the Contractor for organization or overhead expenses. For cost of premiums on public-liability and workers-compensation insurance, Social Security and unemployment-insurance taxes, an amount equal to fifty-five (55) percent of the sum of the labor cost, excluding the twenty-five (25) percent compensation provided above, will be paid to the Contractor. The actual cost of the Contractor's

bond on the extra work will be paid. No charge for superintendence will be made unless considered necessary and ordered by the Engineer.

- b. The Contractor will receive the actual cost, including freight charges, of the materials used on such work to which cost will be added a sum equal to twenty-five (25) percent thereof as compensation. When material invoices indicate a discount may be taken, the actual cost will be the invoice price minus the discount.
- c. For Contractor owned machinery, trucks, power tools or other equipment, which are necessary for use on force account work, the Rental Rate Blue Book as modified by the following will be used to establish hourly rates. Equipment used shall be at the rates in effect for each section of the Blue Book at the time of use. The following formula shall be used to compute the hourly rates:

$$H = \frac{M \times R1 \times R2}{176} + OP$$

Where

- H = Hourly Rate
- M = Monthly Rate
- R1 = Rate Adjustment Factor
- R2 = Regional Adjustment Factor
- OP = Operating Costs

- d. If Contractor-owned equipment is not available and equipment is rented from outside sources, the hourly rate will be established by dividing the actual invoice cost by the actual number of hours the equipment is involved in the work. The City reserves the right to limit the hourly rate to comparable Blue Book rates. When the invoice specifies that the rental rate does not include fuel, lubricants, repairs and servicing, the Rental Rate Blue Book hourly operating cost shall be added for each hour the equipment operates.
- e. If a rate has not been established for a particular piece of equipment in the Rental Rate Blue Book, the Engineer will allow the Contractor a reasonable hourly rate, as agreed upon in writing before such work is begun. This price will include the cost of fuel, lubricants and repairs.
- f. If the Contractor has to mobilize equipment from an off-project site, rates for the hauling equipment and personnel will be included as part of the force account work.
- g. The established equipment hourly rates will be paid for each hour that the equipment is involved in the work to which will be added fifteen (15) percent as compensation. In the event that the equipment is used intermittently during the work, full payment for an eight-hour day will be made if the equipment is not idle more than four (4) hours of the day. If the equipment is idle more than four (4) hours in a day, then payment will be made only for the actual hours worked.
- h. The compensation, as herein provided for, shall be received by the Contractor as payment in full for extra work completed on the "Force Account" basis and will include use of small tools, overhead expense and profit. The Contractor's representative and the Inspector shall compare records of extra work completed on the "Force Account" basis at the end of each day. Copies of these records will be made upon suitable forms provided for this purpose by the City and signed by both the City's and the Contractor's representatives, one copy being forwarded to the Engineer and one to the Contractor. All claims for "Extra Work" performed on the "Force Account" basis shall be submitted to the Engineer by the Contractor upon statements to which shall be attached copies of invoices covering the cost of, and the freight charges on, all materials used in such work, and such statements shall be filed not later than the tenth day of the month following that month in which the work was actually performed.
- i. When extra work is ordered to be performed on a "Force Account" basis, and the estimated cost is less than \$5,000.00, payment of same may be made on the basis of a certified correct invoice submitted to the Engineer by the Contractor. The invoice shall include the Contractor's actual cost for materials, labor, equipment and incidentals necessary to complete the extra work. The invoice will also include additional compensation allowed above, in this Article, as well as the cost of the Contractor's bond on the extra work.
- j. The prime Contractor will be paid for administrative cost only when extra work, ordered by the Engineer, is performed by a subcontractor or a collection of subcontractors. The payment for administrative cost will not exceed five (5) percent of the total subcontracted extra work.

**9.6. Final Invoice.** Contractor shall not be entitled to receive payment of any sum in excess of the cumulative amounts paid upon such monthly invoices as outlined above until forty-five (45) calendar days after Owner transmittal of the Letter of Conditional Approval and not before all the stipulations, requirements and provisions of this Contract are faithfully performed and complied with by Contractor, and unless and until said structures, Work and improvements shall be entirely completed, and delivered to, and accepted by the City in accordance with the Contract Documents. Completion, delivery and acceptance of the Work is evidenced by the Final Certificate of Acceptance issued by the Director of Public Works and such Certificate of Acceptance is approved by the City Manager. Simultaneous with the transmittal of the Final Certificate of Acceptance, the Director of Public Works shall prepare the final invoice as the basis for final Contract settlement, whereupon the same having been first approved by the signature of the City Manager and Director of Finance, the City shall pay to Contractor the amount of such final invoice, taking into account all amounts previously retained and deducted from monthly invoices and any remaining payables to Contractor. Owner may deduct from the amount of such final invoice and retain any and all sums which are to be deducted by City or paid or allowed by Contractor to City, or which are to be retained by Owner for reasons previously stated in Article 9.9.

**9.7. Differing Construction Site Conditions.** The Contractor shall promptly, and before such discovered conditions and/or structures are disturbed, notify the Director of Public Works in writing of (1) subsurface or latent physical and/or structural conditions at the site differing materially from those indicated in the Plans, Specifications, and other Contract Documents or (2) newly discovered, unknown physical conditions at the site of an unusual nature differing materially from those geophysical conditions typically encountered in the type Work being performed and generally being recognized as not indigenous to the Bexar County, Texas environs. The Director of Public Works or his designated representative shall promptly investigate the reported physical and/or structural conditions and shall determine whether or not the physical and/or structural conditions do materially so differ and thereby cause an increase or decrease in the Contractor's cost of, and/or the time required for performance of, any part of the Work under this Contract. In the event that the Director of Public Works reasonably determines that the physical and/or structural conditions do materially so differ, a negotiated, equitable adjustment shall be made to either the Contract Time or Contract Sum, or both, and a Contract Field Alteration shall be promptly issued in writing accordingly.

- .1 No claim of the Contractor under this clause shall be allowed unless the Contractor has given the written notice called for above, prior to disturbing the discovered conditions and/or structures.
- .2 No claim by the Contractor for an equitable adjustment hereunder shall be allowed if claimed by the Contractor after final payment has been made by the City under the terms of this Contract.
- .3 No contract adjustment will be allowed under this clause for any effects caused on unchanged work.

**9.8. Scope of Payment.** The Contractor shall accept the compensation, as provided in the contract, as full payment for furnishing all materials, supplies, labor, tools and equipment necessary to complete the work under the contract; for any loss or damage which may arise from the nature of the work, or from the action of the elements, except as noted in Article 7.16, and as provided in Article 8.7 until the final acceptance by the Engineer, for any infringement of patent, trademark, or copyright; and for completing the work according to the plans and specifications. The payment of any current or partial estimate shall in no way affect the obligation of the Contractor at his expense to repair or renew any defective parts of the construction or to replace any defective materials used in the construction and to be responsible for all damages due to such defects if such defects or damages are discovered on or before the final inspection and acceptance of the work.

**9.9. Withholding of Payment.** In the event that the Owner discovers evidence of Contractor and/or Work noncompliance with the Contract Documents subsequent to approval of the Construction Estimate Certification Forms, the Owner may revoke or otherwise amend that part of any Construction Estimate Certification Form to such extent as may be necessary to withhold monies to protect the Owner from loss on account of:

- a. Defective Work not remedied by Contractor.
- b. Persistent and uncured Contractor non-compliance with the administrative provisions of the Contract Documents.
- c. Damage to Work of another Contractor.

- d. Liquidated Damages assessed by Owner for Contractor failure to maintain scheduled progress in accordance with interim progress milestones, if any are specified in the Contract Documents, and/or Contractor failure to meet final completion date.
- e. Receipt of written notice by the Owner of Contractor's unpaid bills, as stipulated in Article 5472a, V.T.C.S., if the Contractor has not provided a payment bond and only if the Contract Sum does not exceed \$25,000.00. Any funds so withheld by Owner shall be released to the Contractor if he furnishes either a special indemnity bond to Owner securing release of lien as provided in Article 5472b-1, V.T.C.S., or Contractor proof of payment of disputed bills.
- f. "Responsibility for Damage Claims" as provided for in Article 7.12.

.1 When the above Contractor deficiencies are cured, payment will be made by Owner for amounts withheld because of the deficiencies within thirty (30) calendar days.



ALT. NO.	ITEM NO.	DESC. CODE	BID ITEM DESCRIPTION	UNIT OF MEASURE	APPROX. QUANTITIES	UNIT BID PRICE	AMOUNT	ITEM SEQUENCE NO.
	100	2002	PREPARING ROW	STA	68.35			
	104	2001	REMOVING CONC (PAV)	SY	5,517.00			
	104	2017	REMOVING CONC (DRIVEWAYS)	SY	4,891.00			
	104	2029	REMOVING CONC (CURB OR CURB & GUTTER)	LF	7,600.00			
	104	2033	REMOVING CONC (DRAIN)	SY	789.00			
	104	2031	REMOVING CONC (HEADWALL)	CY	5.86			
	104	2036	REMOVING CONC (SIDEWALK OR RAMP)	SY	311.00			
	105	2011	REMOVING STAB BASE AND ASPH PAV (2"-6")	SY	26,984.00			
	110	2001	EXCAVATION (ROADWAY)	CY	5,751.00			
	132	2001	EMBANKMENT (FINAL)(ORD COMP)(TY A)	CY	37,932.90			
	160	2003	FURNISHING AND PLACING TOPSOIL (4")	SY	15,367.22			
	162	2002	BLOCK SODDING	SY	15,367.22			
	168	2001	VEGETATIVE WATERING	MG	251.13			
	260	2002	LIME (HYDRATED LIME (SLURRY))	TON	584.83			
	260	2006	LIME TRT (EXST MATL) (6")	SY	43,320.78			
	316	2028	ASPH(AC-5 OR 10,CRS/HFRS-2,RS/CRS-1P)	GAL	16,195.29			
	316	2582	AGGR (TY-PB GR-4)	CY	539.83			
	340	2236	D-GR HMA(METH) TY-B PG64-22 (LEVEL UP)	TON	749.00			
	341	2011	D-GR HMA(QCQA) TY-B PG64-22	TON	26,795.63			
	341	2034	D-GR HMA(QCQA) TY-C PG64-22	TON	5,955.00			
	354	2045	PLANE ASPH CONC PAV (2")	SY	13,619.00			
	356	2024	PAV JT UNDERSEAL (48")	LF	5,550.00			
	401	2001	FLOWABLE BACKFILL	CY	420.00			
	402	2001	TRENCH EXCAVATION PROTECTION	LF	3,900.00			
	420	2120	CL C CONC (BUS STOP)	CY	556.49			
	432	2001	RIPRAP (CONC)(4 IN)	CY	22.37			
	462	2006	CONC BOX CULV (5 FT X 2 FT)	LF	126.00			
	462	2019	CONC BOX CULV (8 FT X 4 FT)	LF	785.00			
	464	2005	RC PIPE (CL III)(24 IN)	LF	398.00			
	464	2007	RC PIPE (CL III)(30 IN)	LF	44.00			
	464	2009	RC PIPE (CL III)(36 IN)	LF	492.00			
	464	2011	RC PIPE (CL III)(48 IN)	LF	1,110.00			
	464	2013	RC PIPE (CL III)(60 IN)	LF	193.00			

ALT. NO.	ITEM NO.	DESC. CODE	BID ITEM DESCRIPTION	UNIT OF MEASURE	APPROX. QUANTITIES	UNIT BID PRICE	AMOUNT	ITEM SEQUENCE NO.
	465	2092	MANH (COMPL)(TY 1)	EA	5.00			
	465	2193	MANH (COMPL)(TY 2)	EA	3.00			
	465	2289	MANH (COMPL)(TY 3)	EA	2.00			
	465	2194	MANH (COMPL)(TY 4)	EA	1.00			
	465	2020	INLET (COMPL)(CURB)(TY II)	EA	17.00			
	465	2077	INLET (COMPL)(DROP)(TY 1)	EA	2.00			
	465	2211	JUNCTION BOX (SPL)	EA	7.00			
	465	2215	INLET (COMPL)(TY H)(SPL)	EA	1.00			
	465	2405	INLET (COMPL)(CURB)(TY C)	EA	1.00			
	465	2473	INLET EXT (TY II-E)	EA	31.00			
	465	2474	INLET EXT (TY C-E)	EA	2.00			
	465	xxxx	INLET (COMPL)(DROP)(TY 1A)	EA	1.00			
	500	2001	MOBILIZATION	LS	1.00			
	502	2001	BARRICADES, SIGNS AND TRAFFIC HANDLING	MO	9.00			
	502	2047	OFF-DUTY POLICE OFFICER	HR	288.00			
	506	2016	CONSTRUCTION EXITS (INSTALL) (TY 1)	SY	234.00			
	506	2019	CONSTRUCTION EXITS (REMOVE)	SY	234.00			
	506	2032	SANDBAGS FOR EROSION CONTROL (18")	LF	699.00			
	506	2034	TEMPORARY SEDIMENT CONTROL FENCE	LF	144.00			
	508	2002	CONSTRUCTING DETOURS	SY	8,084.00			
	512	2008	PORT CTB (FUR & INST)(LOW PROF)(TY 1)	LF	3,380.00			
	512	2009	PORT CTB (FUR & INST)(LOW PROF)(TY 2)	LF	240.00			
	512	2026	PORT CTB (MOVE)(LOW PROF)(TY 1)	LF	5,580.00			
	512	2027	PORT CTB (MOVE)(LOW PROF)(TY 2)	LF	400.00			
	512	2044	PORT CTB (REMOVE)(LOW PROF)(TY 1)	LF	3,380.00			
	512	2045	PORT CTB (REMOVE)(LOW PROF)(TY 2)	LF	240.00			
	529	2001	CONC CURB (TY I)	LF	12,096.00			
	530	2010	DRIVEWAYS (CONC)	SY	4,180.00			
	531	2015	CONC SIDEWALK (4")	SY	3,161.53			
	531	2034	CONC SIDEWALK (DRAIN)	LF	14.00			
	531	2008	CURB RAMPS (TY 4)	EA	13.00			
	531	2040	CURB RAMPS (TY 5)	EA	3.00			
	536	2004	CONC DIRECTIONAL ISLAND	SY	718.00			
	618	2018	CONDT (PVC) (SCHD 40) ( 2")	LF	253.00			

ALT. NO.	ITEM NO.	DESC. CODE	BID ITEM DESCRIPTION	UNIT OF MEASURE	APPROX. QUANTITIES	UNIT BID PRICE	AMOUNT	ITEM SEQUENCE NO.
	618	2022	CONDT (PVC) (SCHD 40) (3")	LF	187.00			
	618	2023	CONDT (PVC) (SCHD 40) (3") (BORE)	LF	1,396.00			
	620	2009	ELEC CONDR (NO. 6) BARE	LF	31.00			
	620	2010	ELEC CONDR (NO. 6) INSULATED	LF	50.00			
	620	2011	ELEC CONDR (NO. 8) BARE	LF	1,499.00			
	624	2014	GROUND BOX TY D (162922) W/APRON	EA	11.00			
	628	2148	ELC SRV TY D 120/240 060 (NS)SS(E)SP(U)	EA	3.00			
	636	2001	ALUMINUM SIGNS (TY A)	SF	30.00			
	644	XXX1	INS SM RD SN SUP&AM COSA TY U MOUNT (POST TY 1)	EA	43.00			
	644	XXX2	INS SM RD SN SUP&AM COSA TY U MOUNT (POST TY 2)	EA	2.00			
	644	2060	REMOVE SM RD SN SUP & AM	EA	18.00			
	647	2002	RELOCATE LRSA	EA	2.00			
	662	2001	WK ZN PAV MRK NON-REMOV (W) 4" (BRK)	LF	6,270.00			
	662	2004	WK ZN PAV MRK NON-REMOV (W) 4" (SLD)	LF	30,810.00			
	662	2011	WK ZN PAV MRK NON-REMOV (W) 8" (LNDP)	LF	408.00			
	662	2012	WK ZN PAV MRK NON-REMOV (W) 8" (SLD)	LF	405.00			
	662	2016	WK ZN PAV MRK NON-REMOV (W) 24" (SLD)	LF	452.00			
	662	2032	WK ZN PAV MRK NON-REMOV (Y) 4" (SLD)	LF	25,450.00			
	666	2003	REFL PAV MRK TY I (W) 4" (BRK)(100MIL)	LF	3,640.00			
	666	2012	REFL PAV MRK TY I (W) 4" (SLD)(100MIL)	LF	8,622.00			
	666	2015	REFL PAV MRK TY I (W) 6" (BRK)(100MIL)	LF	118.00			
	666	2033	REFL PAV MRK TY I (W) 8" (LNDP)(100MIL)	LF	205.00			
	666	2036	REFL PAV MRK TY I (W) 8" (SLD)(100MIL)	LF	9,657.00			
	666	2048	REFL PAV MRK TY I (W) 24"(SLD)(100MIL)	LF	1,785.00			
	666	2054	REFL PAV MRK TY I (W) (ARROW) (100MIL)	EA	36.00			
	666	2057	REFL PAV MRK TY I (W)(BIKE ARW)(100MIL)	EA	18.00			
	666	2063	REFL PAV MRK TY I(W)(BIKE SYML)(100MIL)	EA	18.00			
	666	2072	REFL PAV MRK TY I(W)(ENTR GORE)(100MIL)	EA	3.00			
	666	2075	REFL PAV MRK TY I(W)(EXIT GORE)(100MIL)	EA	2.00			
	666	2096	REFL PAV MRK TY I (W) (WORD) (100MIL)	EA	10.00			
	666	2099	REF PAV MRK TY I(W)18"(YLD TRI)(100MIL)	EA	2.00			
	666	2111	REFL PAV MRK TY I (Y) 4" (SLD)(100MIL)	LF	18,552.00			
	666	2132	REFL PAV MRK TY I (Y) 24"(SLD)(100MIL)	LF	2,539.00			
	666	2141	REFL PAV MRK TY I (Y)(MED NOSE)(100MIL)	EA	12.00			

ALT. NO.	ITEM NO.	DESC. CODE	BID ITEM DESCRIPTION	UNIT OF MEASURE	APPROX. QUANTITIES	UNIT BID PRICE	AMOUNT	ITEM SEQUENCE NO.
	666	2189	PAVEMENT SEALER 4"	LF	30,814.00			
	666	2191	PAVEMENT SEALER 8"	LF	9,622.00			
	666	2195	PAVEMENT SEALER 24"	LF	4,324.00			
	672	2012	REFL PAV MRKR TY I-C	EA	565.00			
	672	2015	REFL PAV MRKR TY II-A-A	EA	586.00			
	677	2001	ELIM EXT PAV MRK & MRKS ( 4")	LF	62,530.00			
	677	2003	ELIM EXT PAV MRK & MRKS ( 8")	LF	813.00			
	677	2007	ELIM EXT PAV MRK & MRKS (24")	LF	452.00			
	680	2003	INSTALL HWY TRF SIG (SYSTEM)	EA	3.00			
	681	2001	TEMP TRAF SIGNALS	EA	3.00			
	682	2001	BACK PLATE (12 IN) (3 SEC)	EA	27.00			
	682	2002	BACK PLATE (12 IN) (4 SEC)	EA	3.00			
	682	2022	VEH SIG SEC (12 IN) LED (GRN ARW)	EA	11.00			
	682	2023	VEH SIG SEC (12 IN) LED (GRN)	EA	20.00			
	682	2024	VEH SIG SEC (12 IN) LED (YEL ARW)	EA	11.00			
	682	2025	VEH SIG SEC (12 IN) LED (YEL)	EA	20.00			
	682	2026	VEH SIG SEC (12 IN) LED (RED ARW)	EA	7.00			
	682	2027	VEH SIG SEC (12 IN) LED (RED)	EA	22.00			
	682	2044	PED SIG SEC (12IN)(2 INDICAT IN 1 SEC)	EA	8.00			
	621	2002	TRAY CABLE (3 CONDR) (12 AWG)	LF	1,640.00			
	684	2012	TRF SIG CBL (TY A) (12 AWG) ( 7 CONDR)	LF	1,590.00			
	684	2035	TRF SIG CBL (TY A) (14 AWG) ( 9 CONDR)	LF	1,003.00			
	686	2031	INS TRF SIG PL AM(S) 1 ARM (32')	EA	1.00			
	686	2035	INS TRF SIG PL AM(S) 1 ARM (36')	EA	2.00			
	686	2039	INS TRF SIG PL AM(S) 1 ARM (40')	EA	2.00			
	686	2047	INS TRF SIG PL AM(S) 1 ARM (48')	EA	3.00			
	686	2059	INS TRF SIG PL AM(S) 1 ARM (60')	EA	1.00			
	686	2063	INS TRF SIG PL AM(S) 1 ARM (65')	EA	1.00			
	688	2001	PED DETECT (2 INCH PUSH BTN)	EA	8.00			
	416	2031	DRILL SHAFT (TRF SIG POLE) (30 IN)	LF	12.00			
	416	2032	DRILL SHAFT (TRF SIG POLE) (36 IN)	LF	94.00			
	416	2034	DRILL SHAFT (TRF SIG POLE) (48 IN)	LF	44.00			
	687	2001	PED POLE ASSEMBLY	EA	4.00			
	6041	XXXX	ILSN (LED)(8 D)	EA	10.00			

ALT. NO.	ITEM NO.	DESC. CODE	BID ITEM DESCRIPTION	UNIT OF MEASURE	APPROX. QUANTITIES	UNIT BID PRICE	AMOUNT	ITEM SEQUENCE NO.
	6044	2001	VIVDS PROCESSOR SYSTEM	EA	6.00			
	6044	2002	VIVDS CAMERA ASSEMBLY	EA	21.00			
	6044	2003	VIVDS SET-UP SYSTEM	EA	3.00			
	6044	2005	VIVDS COMMUNICATION CABLE (COAXIAL)	LF	2,613.00			
	8260	2001	LED COUNTDOWN PEDESTRIAN MODULE	EA	12.00			
	8317	XXXX	BATTERY BACKUP SYSTEM FOR TRAFFIC SIGNAL	EA	3.00			
	6525	XXXX	EMERGENCY PREEMPTION PHASE SELECTOR	EA	3.00			
	6525	XXXX	EMERGENCY PREEMPTION DETECTOR	EA	10.00			
	6525	XXXX	EMERGENCY PREEMPTION DETECTOR CABLE	LF	1,518.00			
	6834	2001	PORTABLE CHANGEABLE MESSAGE SIGN	DAY	29.00			
	8245	XXXX	MODEL 2070 CONTROLLER UNIT	EA	3.00			
	8643	XXXX	TYPE 2070 CONTROLLER CABINET ASSEMBLY	EA	3.00			
	8703	XXXX	ACCESSIBLE PEDESTRIAN SIGNAL UNITS	EA	8.00			
	9604	2001	CONTRACTOR FORCE ACCOUNT 1	DOL	5,000.00			
	9501	XX01	MOBILIZATION (10%)	LS	1.00			
	9501	XX02	PREPARE ROW (5%)	LS	1.00			
	9501	XX03	TRENCH EXCAVATION PROTECTION	LF	5,500.00			
	9501	XX04	8" PVC WATER MAIN (RESTRAINED)	LF	545.00			
	9501	XX05	12" PVC WATER MAIN	LF	4,230.00			
	9501	XX06	16" PVC WATER MAIN	LF	585.00			
	9501	XX07	20" DI WATER MAIN	LF	140.00			
	9501	XX08	VALVE BOX ADJUSTMENT	EA	8.00			
	9501	XX09	8" GATE VALVE	EA	6.00			
	9501	XX10	12" GATE VALVE	EA	13.00			
	9501	XX11	16" GATE VALVE	EA	2.00			
	9501	XX12	20" BUTTERFLY VALVE	EA	1.00			
	9501	XX13	8" TIE-IN	EA	7.00			
	9501	XX14	12" TIE IN	EA	7.00			
	9501	XX15	16" TIE-IN	EA	1.00			
	9501	XX16	20" TIE-IN	EA	1.00			
	9501	XX17	FIRE HYDRANT ASSEMBLY	EA	7.00			
	9501	XX18	RELAY 3/4" SHORT SERVICE	EA	5.00			
	9501	XX19	RELAY 1" SHORT SERVICE	EA	1.00			
	9501	XX20	RELAY 1" LONG SERVICE	EA	1.00			

ALT. NO.	ITEM NO.	DESC. CODE	BID ITEM DESCRIPTION	UNIT OF MEASURE	APPROX. QUANTITIES	UNIT BID PRICE	AMOUNT	ITEM SEQUENCE NO.
	9501	XX21	RELAY 2" SHORT SERVICE	EA	2.00			
	9501	XX22	PIPE FITTINGS	TON	15.00			
	9501	XX23	CASING OR LINER, 24"	LF	75.00			
	9501	XX24	HYDROSTATIC TESTING	EA	5.00			
	9501	XX25	2" BLOWOFF TEMPORARY	EA	14.00			
	9501	XX26	4" BLOWOFF TEMPORARY	EA	1.00			
	9501	XX27	2" BLOWOFF PERMANENT	EA	1.00			
	9501	XX28	TRENCH COMPLETION TYPE "A"	SY	313.00			
	9501	XX29	TRENCH COMPLETION TYPE "B"	SY	2,115.00			
	9501	XX30	AC PIPE REMOVAL	LS	1.00			
	9501	XX31	AC PIPE REMOVAL PLAN	LS	1.00			
	9501	XX32	RECYCLED WATER VAULT RECONSTRUCTION	EA	3.00			
	9501	XX33	RECYCLED WATER HYDRANT RELOCATION	EA	1.00			
	9501	XX34	FLOWABLE BACKFILL	CY	122.00			
	9501	XX35	CONCRETE ENCASEMENT, CRADLES, SADDLES & COLLARS	CY	18.00			
	9500	XX01	MOBILIZATION (10%)	LS	1.00			
	9500	XX02	PREP ROW (5%)	LS	1.00			
	9500	XX03	ADJUST EXISTING MANHOLE	EA	16.00			
	9500	XX04	8" PVC SANITARY SEWER LINE (10' - 14')	LF	65.00			
	9500	XX05	SEWER MAIN TELEVISION INSPECTION (PRE CONSTRUCTION)	LF	900.00			
	9500	XX06	SANITARY SEWER DROP MANHOLE (0' - 6')	EA	2.00			
	9500	XX07	EXTRA DEPTH MANHOLE (>6')	VF	11.00			
	9500	XX08	8" PVC SANITARY SEWER LINE (6' - 10')	LF	78.00			
	9500	XX09	SANITARY SEWER MANHOLE (0'-6')	EA	4.00			
	9500	XX10	SANITARY SEWER LATERAL	LF	180.00			
	9500	XX11	SANITARY SEWER CLEANOUT	EA	6.00			
	9500	XX12	BYPASS PUMPING	LS	1.00			
	9500	XX13	TRENCH COMPLETION CONDITION "B"	SY	93.00			
	9500	XX14	TRENCH COMPLETION CONDITION "C"	SY	20.00			
	9500	XX15	TRENCH EXCAVATION PROTECTION	LF	143.00			
	9500	XX16	SEWER MAIN TELEVISION INSPECTION(POST CONSTRUCTION)	LF	143.00			
	9503	9001	NGP (SHORT SERV)(NEW MAIN TO PROP)	FT	1.00			
	9503	9003	NGP (SHORT SERV)(NEW MAIN TO METER)	FT	4.00			
	9503	9004	NGP (LONG SERV)(NEW MAIN TO METER)	FT	1.00			

ALT. NO.	ITEM NO.	DESC. CODE	BID ITEM DESCRIPTION	UNIT OF MEASURE	APPROX. QUANTITIES	UNIT BID PRICE	AMOUNT	ITEM SEQUENCE NO.
	9503	9005	NGP (EXTEND)(PUMP TEST AND TIE TO METER)	FT	1.00			
	9503	9006	NGP (MAIN)(PLASTIC W/ TRACER)(2 IN)(TRENCH)	FT	1,000.00			
	9503	9007	NGP (MAIN)(PLASTIC W/ TRACER)(6 IN)(TRENCH)	FT	2,771.00			
	9503	9008	NGP (MAIN)(PLASTIC W/ TRACER)(8 IN)(TRENCH)	FT	46.00			
	9503	9009	NGP (MAIN)(STEEL)(8 IN)(TRENCH)	FT	142.00			
	9503	9010	NGP (MAIN)(STEEL)(16 IN)(TRENCH)	FT	1,104.00			
	9503	9011	NGP (MAIN)(STEEL)(16 IN) AND PLASTIC (6 IN)(JOINT TRENCH)	FT	340.00			
	9503	9012	NGP (MAIN)(PLASTIC W/ TRACER)(2 IN)(BORE)	FT	59.00			
	9503	9013	NGP (MAIN)(PLASTIC W/ TRACER)(6 IN)(BORE)	FT	385.00			
	9503	9014	NGP (MAIN)(STEEL)(16 IN)(BORE)	FT	100.00			
	9503	9015	TRENCH EXCAVATION PROTECTION	FT	5,403.00			
	9503	9016	NGP (STOPPLE) (16IN)(TWD SERVICE)	EA	3.00			
	9503	9017	FLOWABLE BACKFILL	CY	390.00			
	9503	9018	ASPHALT	SY	460.00			
	9503	9019	MOBILIZATION	LS	1.00			

\_\_\_\_\_certifies that the unit prices shown on this complete computer print-out for all of the bid items and the alternates contained in this proposal are the unit prices intended and that its bid will be tabulated using these unit prices and no other information from this print-out.

\_\_\_\_\_Acknowledged and agrees that the total bid amount shown will be read as its total bid and further agrees that the official total bid amount will be determined by multiplying the unit bid prices shown in this print-out by the respective estimated quantities shown in the proposal and then totaling all of the extended amounts. \_\_\_\_\_ agrees to the terms, conditions, and requirements of the bidder's bid proposal.

Signed: \_\_\_\_\_ Date: \_\_\_\_\_

Title: \_\_\_\_\_